

NOMINAL LUMENS	DELIVERED LUMENS	WATTAGE
2200	2506	32.4 W
1800	1862	21.7 W
1200	1198	13.4 W

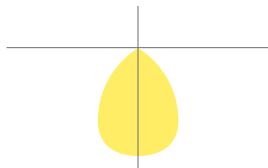
Based on 3000K, 90+ CRI. Actual wattage may vary +/- 5%

FEATURES

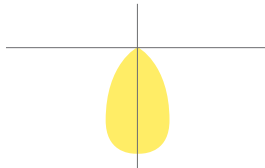
A small profile LED pendant mounted luminaire that delivers optimal lumen output for general illumination, integrating into any design. Available in an array of color temperatures, it can accentuate the full spectrum of cool to warm tones, and is the perfect complement for commercial, retail, hospitality, or high-end residential applications.

LUMENS	1200, 1800, 2200
CCT	27K, 30K, 35K, 40K, 50K WDM-30K-18K, CW-42K, RG-37K
CRI	90+
COLOR QUALITY	2 Step MacAdam Ellipse
DISTRIBUTION	Narrow Spot (15°), Flood (30°), Wide Flood (38°)
MOUNTING	Suspended
FINISH	AWH (Architectural White) ABK (Architectural Black) Custom RAL
DIMMING	DIM10 (0-10V Dimming) DIMTR (Triac dimming)
LIFETIME	L70 at 100,000 Hours
PHOTOMETRIC TESTS	In Accordance with IES LM79-08, LM80 and TM-30, TM-21

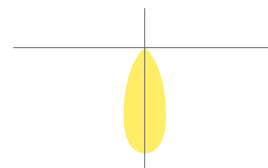
WFL: WIDE FLOOD
Candlepower Distribution Curve



FL: FLOOD
Candlepower Distribution Curve



NS: NARROW SPOT
Candlepower Distribution Curve



Reference IES files for additional distribution curve information.



PERFORMANCE:

Available in eight color temperatures (CW) Crisp White, (RG) Red Glow, (WDM) Warm Dim and 2700K, 3000K, 3500K, 4000K, and 5000K

Crisp White is ideal for retail applications, especially jewelry stores. Our Crisp White technology is designed to accentuate the full spectrum, enhancing cool tones such as blues and greens to be vibrant, and warm tones such as red and orange to be vivid.

Red Glow technology is designed to be used in restaurants and grocery stores, enhancing products in the produce, meat, fish, and poultry departments.

Warm Dim with Smart Dim technology mimics traditional incandescent halogen lighting through dimming. Using Warm Dim, luminaires shift over the black body radiator curve as the light dims, transitioning into the rich amber tones that encourages relaxation. Ideal for hospitality, commercial, and residential applications, it maintains a high lumen output, and comes paired with a high CRI of 90+ that guarantees color consistency within a 2 step MacAdam Ellipse.

CONSTRUCTION:

Post-painted powder coated extruded aluminum body.

OPTICS:

A polycarbonate optical refractor allows for precise beam control and even distribution, with a variety of lumen options. Optics are field changeable and available in NS (Narrow Spot), FL (Flood), and WFL (Wide Flood) options.

FINISH:

Post-painted available in white, black and custom RAL colors.

DIMMING & DRIVER INFORMATION

DIM10 - 0-10V dimming on either MVOLT or 120. Dimmable down to 1% of initial lumens, standard.

DIMTR - Triac & Electronic low voltage dimming, available in 120V.

MOUNTING BRACKET AND SUSPENSION SYSTEM

Ceiling mount bracket provided for direct installation with 3-1/4" to 4" octagonal and square junction box. Pedant mounted option is supplied with a 10ft. adjustable aircraft cable and power cord, which can be field adjusted for desired length. Please consult factory for custom mounting and stem options.

WARRANTY

All Fusion Pendants are designed using a proprietary coolLED Advanced Thermodynamic Design Heat management system is engineered for extremely long life and service period, with a 5-year limited warranty.

LISTING

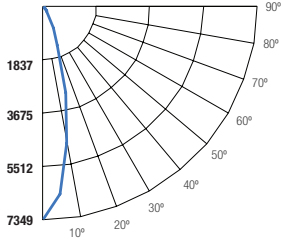
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Example: **FPR1-LED-WM-2200L-DIM10-MVOLT-WFL-30K-90-WH**

SERIES	LUMENS/DIMMING	OPTICS	CCT/CRI		EMERGENCY	COLOR
			DYNAMIC LIGHTING	STANDARD SERIES		
FPR1-LED-WM	<input type="checkbox"/> 1200L-DIMTR-120 <input type="checkbox"/> 1200L-DIM10-MVOLT <input type="checkbox"/> 1800L-DIMTR-120 <input type="checkbox"/> 1800L-DIM10-MVOLT <input type="checkbox"/> 2200L-DIMTR-120 <input type="checkbox"/> 2200L-DIM10-MVOLT	<input type="checkbox"/> NS (15°) <input type="checkbox"/> FL (30°) <input type="checkbox"/> WFL (38°)	Warm Dim <input type="checkbox"/> WDM-30K-18K ----- Vibrant Series <input type="checkbox"/> CW(42K/96/93) <input type="checkbox"/> RG(37K/66)	<input type="checkbox"/> 27K-90 <input type="checkbox"/> 30K-90 <input type="checkbox"/> 35K-90 <input type="checkbox"/> 40K-90 <input type="checkbox"/> 50K-90	<input type="checkbox"/> 0-EMG-LED-10W <input type="checkbox"/> 0-EMG-LED-20W <i>Remote Mount Please consult factory</i>	<input type="checkbox"/> BK(Black) <input type="checkbox"/> WH(White) <i>Custom colors available. Please consult factory</i>

FPR1-LED-WM-1800L-DIM10-MVOLT-FL-40K-90-WH TEST NO.: **EL061863**
 INPUT WATTS: **21.7** LUMENS: **1862** CRI: **90** EFFICACY: **86** CCT: **4000K** SPACING CRITERIA: **0.46**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	25.4 fc	8.1 ft
8.0	6.36 fc	16.3 ft
12.0	2.83 fc	24.4 ft
16.0	1.59 fc	32.5 ft
20.0	1.02 fc	40.7 ft
24.0	0.71 fc	48.8 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	1387.36	76.60	74.50
0-30	1749.14	96.60	93.90
0-40	1819.66	100.50	97.70
0-60	1852.14	102.30	99.50
0-80	1860.53	102.80	99.90
0-90	1862.22	102.90	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average		
	0°	45°	90°
45	3666	4355	9636
55	1640	2085	2229
65	1377	1419	1877
75	1409	1695	1817
85	1197	3275	3534

Lumens Per Zone

Zone	Lumens
0-10	570.06
10-20	817.30
20-30	361.78
30-40	70.52
40-50	23.95
50-60	8.53
60-70	5.11
70-80	3.28
80-90	1.68

Candela Tabulation

Q	
0	7349.16
5	6508.68
15	2736.30
25	721.22
35	57.16
45	20.62
55	7.48
65	4.63
75	2.90
85	0.83
90	0.05

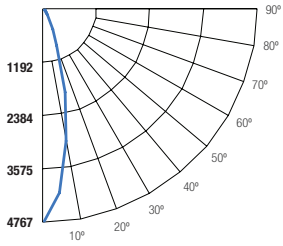
Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

RC	80%				70%				50%				30%				10%				0%			
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%		
ROOM CAVITY RATIO	0	122	122	122	122	120	120	120	120	114	114	114	109	109	109	105	105	105	105	105	105	103		
	1	118	116	114	112	116	114	112	110	109	108	107	106	105	104	102	101	101	101	101	101	99		
	2	114	110	107	104	112	108	105	103	105	103	101	102	100	99	99	99	98	97	96	95			
	3	110	105	101	98	108	104	100	97	101	98	96	99	96	94	94	94	93	91	90	88			
	4	106	100	96	93	105	99	95	92	97	94	91	95	93	90	94	91	89	88	88				
	5	103	96	92	89	101	96	91	88	94	90	88	92	89	87	91	88	86	85	84				
	6	100	93	88	85	98	92	88	85	91	87	84	89	86	84	88	85	83	82	81				
	7	97	90	85	82	95	89	85	82	88	84	81	87	83	81	86	83	81	79	79				
	8	94	87	82	79	93	86	82	79	85	81	79	84	81	78	83	80	78	77	76				
	9	91	84	79	76	90	83	79	76	83	79	76	82	78	76	81	78	76	75	74				
	10	88	81	77	74	88	81	77	74	80	76	74	79	76	74	79	76	73	72	72				

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

FPR1-LED-WM-1200L-DIM10-MVOLT-FL-40K-90-WH TEST NO.: **EL061856**
 INPUT WATTS: **13.4** LUMENS: **1198** CRI: **90** EFFICACY: **89** CCT: **4000K** SPACING CRITERIA: **0.46**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	16.5 fc	8.1 ft
8.0	4.12 fc	16.2 ft
12.0	1.83 fc	24.2 ft
16.0	1.03 fc	32.2 ft
20.0	0.66 fc	40.4 ft
24.0	0.46 fc	48.5 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	894.86	76.20	74.70
0-30	1122.47	95.60	93.70
0-40	1166.47	99.30	97.40
0-60	1189.58	101.30	99.30
0-80	1196.28	101.80	99.90
0-90	1197.51	102.00	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average		
	0°	45°	90°
45	2119	2311	4769
55	1035	1207	1274
65	865	862	1094
75	794	920	1061
85	453	1700	1915

Lumens Per Zone

Zone	Lumens
0-10	370.22
10-20	524.64
20-30	227.61
30-40	44.00
40-50	16.42
50-60	6.69
60-70	4.10
70-80	2.60
80-90	1.24

Candela Tabulation

Q	
0	4767.16
5	4340.53
15	1764.29
25	442.70
35	40.88
45	15.17
55	6.01
65	3.70
75	2.08
85	0.40
90	0.03

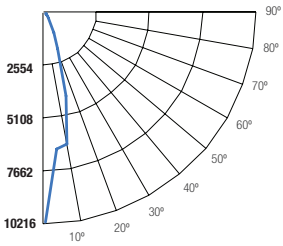
Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

RC	80%				70%				50%				30%				10%				0%			
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%		
ROOM CAVITY RATIO	0	121	121	121	121	119	119	119	119	113	113	113	108	108	108	104	104	104	104	104	104	102		
	1	117	115	113	111	115	113	111	109	108	107	106	105	104	103	101	101	100	100	100	98			
	2	113	109	106	103	111	107	104	102	104	102	100	101	99	98	98	96	96	94	93	91			
	3	109	104	100	97	107	103	99	96	100	97	95	98	95	93	96	94	92	91	90	88			
	4	105	100	95	92	104	98	95	92	96	93	91	95	92	90	93	90	89	87	87				
	5	102	96	91	88	101	95	91	88	93	90	87	92	88	86	90	87	85	84	84				
	6	99	92	88	84	97	91	87	84	90	86	84	89	85	83	87	85	82	81	81				
	7	96	89	84	81	95	88	84	81	87	83	81	86	83	80	85	82	80	79	79				
	8	93	86	81	78	92	85	81	78	84	81	78	83	80	78	83	80	77	76	75				
	9	90	83	79	76	89	83	78	76	82	78	75	81	78	75	80	77	75	74	74				
	10	88	81	76	73	87	80	76	73	79	76	73	79	75	73	78	75	73	72	72				

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

FPR1-LED-WM-2200L-DIM10-MVOLT-FL-40K-90-WH TEST NO.: **EL061859**
 INPUT WATTS: **32.4** LUMENS: **2506** CRI: **90** EFFICACY: **77** CCT: **4000K** SPACING CRITERIA: **0.46**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	35.3 fc	8.1 ft
8.0	8.84 fc	16.1 ft
12.0	3.93 fc	24.2 ft
16.0	2.21 fc	32.3 ft
20.0	1.41 fc	40.4 ft
24.0	0.98 fc	48.4 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	1820.94	74.90	72.70
0-30	2338.93	96.20	93.30
0-40	2442.99	100.50	97.50
0-60	2490.33	102.50	99.40
0-80	2503.31	103.00	99.90
0-90	2505.76	103.10	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average		
	0°	45°	90°
45	4278	5033	9625
55	2013	2508	2710
65	1727	1734	2238
75	1721	1984	2095
85	1201	3682	3932

Lumens Per Zone

Zone	Lumens
0-10	699.52
10-20	1121.42
20-30	517.99
30-40	104.06
40-50	34.21
50-60	13.13
60-70	7.97
70-80	5.01
80-90	2.45

Candela Tabulation

Q	
0	10215.84
5	9029.99
15	3754.75
25	977.54
35	84.32
45	30.63
55	11.69
65	7.39
75	4.51
85	1.06
90	0.06

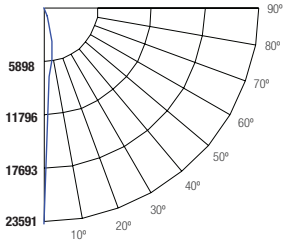
Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

RC	80%				70%				50%				30%				10%				0%			
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%		
ROOM CAVITY RATIO	0	123	123	123	123	120	120	120	120	115	115	115	110	110	110	105	105	105	105	105	105	103		
	1	118	116	114	112	118	114	112	110	110	108	107	105	105	104	102	101	101	101	101	101	99		
	2	114	110	107	104	112	108	105	103	105	103	100	102	100	98	99	98	96	95	95	93			
	3	110	105	101	98	108	103	100	97	101	98	95	98	96	94	96	94	92	91	90	88			
	4	106	100	96	92	104	99	95	92	97	94	91	95	92	90	93	91	89	88	88				

FPR1-LED-WM-3000L-DIM10-MVOLT-NS-40K-90-WH

INPUT WATTS: **42.8** LUMENS: **3181** CRI: **90** EFFICACY: **74** CCT: **4000K** TEST NO.: **EL061855** SPACING CRITERIA: **0.30**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	81.6 fc	4.6 ft
8.0	20.4 fc	9.1 ft
12.0	9.07 fc	13.7 ft
16.0	5.1 fc	18.2 ft
20.0	3.27 fc	22.8 ft
24.0	2.27 fc	27.3 ft

Distance to Plane Initial Footcandle at Nadir Beam diameter
BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	2420.72	80.70	76.10
0-30	2984.96	99.50	93.80
0-40	3109.5	103.60	97.80
0-60	3161.54	105.30	99.40
0-80	3177.58	105.90	99.90
0-90	3180.77	106.00	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average		
	0°	45°	90°
45	7355	5044	4557
55	2320	2358	2177
65	2360	1925	2246
75	2703	2244	2238
85	5032	4418	1805

Lumens Per Zone

Zone	Lumens
0-10	1118.53
10-20	1302.19
20-30	564.24
30-40	124.54
40-50	38.82
50-60	13.22
60-70	9.42
70-80	6.62
80-90	3.18

Candela Tabulation

0		
0	23591.197	
5	7540.987	
15	3773.290	
25	961.760	
35	127.701	
45	52.664	
55	13.475	
65	10.102	
75	7.085	
85	4.441	
90	3.119	

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

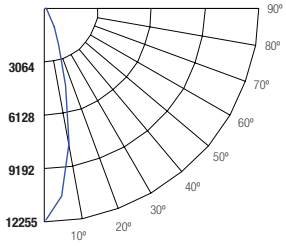
RC	80%				70%				50%				30%				10%				0%			
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%			
ROOM CAVITY RATIO																								
0	126	126	126	126	126	123	123	123	123	118	118	118	113	113	113	108	108	108	106					
1	122	119	117	115	119	117	115	114	113	112	110	109	108	107	105	105	104	102	106					
2	118	114	110	108	115	112	109	106	109	106	104	106	104	102	103	101	100	98	108					
3	114	109	107	104	112	107	104	101	105	102	99	102	100	98	103	98	96	95	106					
4	110	104	100	97	108	103	99	96	101	98	95	99	96	94	97	95	93	92	108					
5	107	100	96	93	105	99	95	92	98	94	91	96	93	91	95	92	90	89	108					
6	103	97	92	89	102	96	92	89	95	91	88	93	90	88	92	89	87	86	108					
7	101	94	89	86	99	93	89	86	92	88	85	91	87	85	90	87	84	83	108					
8	98	91	86	83	97	90	86	83	89	85	83	88	85	82	87	84	82	81	108					
9	95	88	83	80	94	87	83	80	87	83	80	86	82	80	85	82	80	79	108					
10	93	85	81	78	92	85	81	78	84	80	78	84	80	78	83	80	77	76	108					

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

FPR1-LED-WM-3000L-DIM10-MVOLT-FL-40K-90-WH

INPUT WATTS: **42.5** LUMENS: **3037** CRI: **90** EFFICACY: **71** CCT: **4000K** TEST NO.: **EL061860** SPACING CRITERIA: **0.46**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	42.4 fc	7.7 ft
8.0	10.6 fc	15.4 ft
12.0	4.71 fc	23.1 ft
16.0	2.65 fc	30.8 ft
20.0	1.7 fc	38.5 ft
24.0	1.18 fc	46.2 ft

Distance to Plane Initial Footcandle at Nadir Beam diameter
BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	2230.00	75.60	73.40
0-30	2837.97	96.20	93.40
0-40	2961.32	100.30	97.50
0-60	3018.3	102.30	99.40
0-80	3034.01	102.80	99.90
0-90	3036.98	102.90	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average		
	0°	45°	90°
45	6684	7929	16096
55	3152	3954	4272
65	2689	2716	3508
75	2716	3099	3250
85	2438	5698	6059

Lumens Per Zone

Zone	Lumens
0-10	930.71
10-20	1299.29
20-30	607.97
30-40	123.36
40-50	41.07
50-60	15.91
60-70	9.65
70-80	6.07
80-90	2.97

Candela Tabulation

0		
0	12255.45	
5	10924.23	
15	4605.42	
25	1203.98	
35	102.03	
45	37.59	
55	14.38	
65	9.04	
75	5.59	
85	1.69	
90	0.08	

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

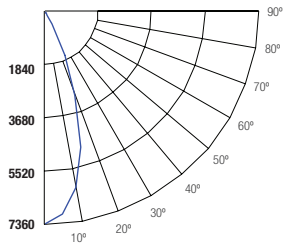
RC	80%				70%				50%				30%				10%				0%			
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%			
ROOM CAVITY RATIO																								
0	122	122	122	122	122	120	120	120	120	114	114	114	109	109	109	105	105	105	105					
1	118	116	114	112	112	116	114	112	110	109	108	107	102	100	98	99	98	95	108					
2	114	110	107	104	112	108	105	103	101	105	103	101	102	100	98	99	96	94	108					
3	110	105	101	98	108	103	100	97	101	98	95	95	96	94	96	94	93	91	108					
4	106	100	96	93	105	99	95	92	97	94	91	95	92	90	93	91	89	88	108					
5	103	96	92	89	101	95	91	88	94	90	87	92	89	87	91	88	86	85	108					
6	99	93	88	85	98	92	88	85	91	87	84	89	86	83	88	85	83	82	108					
7	96	89	85	82	95	89	84	81	88	84	81	87	83	81	85	83	80	79	108					
8	94	86	82	79	93	86	82	79	85	81	78	84	80	78	83	80	78	77	108					
9	91	84	79	76	90	83	79	76	82	78	76	81	78	75	81	78	75	74	108					
10	88	81	77	74	87	81	76	74	80	76	73	79	76	73	79	75	73	72	108					

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

FPR1-LED-WM-3000L-DIM10-MVOLT-WFL-40K-90-WH

INPUT WATTS: **42.6** LUMENS: **3036** CRI: **85** EFFICACY: **71** CCT: **4000K** TEST NO.: **EL061861** SPACING CRITERIA: **0.60**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	25.5 fc	11.4 ft
8.0	6.37 fc	22.8 ft
12.0	2.83 fc	34.2 ft
16.0	1.59 fc	45.6 ft
20.0	1.02 fc	57 ft
24.0	0.71 fc	68.4 ft

Distance to Plane Initial Footcandle at Nadir Beam diameter
BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	1964.66	65.80	64.70
0-30	2781.59	93.20	91.60
0-40	2950.41	98.80	97.20
0-60	3018.92	101.10	99.50
0-80	3033.05	101.60	99.90
0-90	3035.53	101.70	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average		
	0°	45°	90°
45	6698	7840	24134
55	3222	3887	4165
65	2208	2481	3171
75	1865	2385	2686
85	721	4703	5222

Lumens Per Zone

Zone	Lumens
0-10	646.49
10-20	1318.17
20-30	816.94
30-40	168.82
40-50	51.70
50-60	16.81
60-70	9.07
70-80	5.05
80-90	2.49

Candela Tabulation

0		
0	7359.58	
5	7048.36	
15	4852.36	
25	1647.69	
35	115.93	
45	37.67	
55	14.70	
65	7.42	
75	3.84	
85	0.50	
90	0.07	

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

RC	80%				70%				50%				30%				10%				0%			
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%			
ROOM CAVITY RATIO																								
0	121	121	121	121	121	118	118	118	118	113	113	113	108	108	108	104	104	104	102					
1	116	114	110	110	114	112	110	108	108	108	105	105	104	103	102	100	100	99	10					