

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: HALO

Report Number: P670584

Luminaire Tested: WXPM120LSFSUNVDBZ-90W-3000K

Issue Date: 4/4/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P670584  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( 2022-08-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/4/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: WXP120LSFSUNVDBZ-90W-3000K  
Description: WALL PACK  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10815 lumens  
Efficiency: N/A  
Efficacy: 119.9 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.58' x L: 0.94' x H: 0.45')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U4 - G5

Input Watts (W): 90.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT

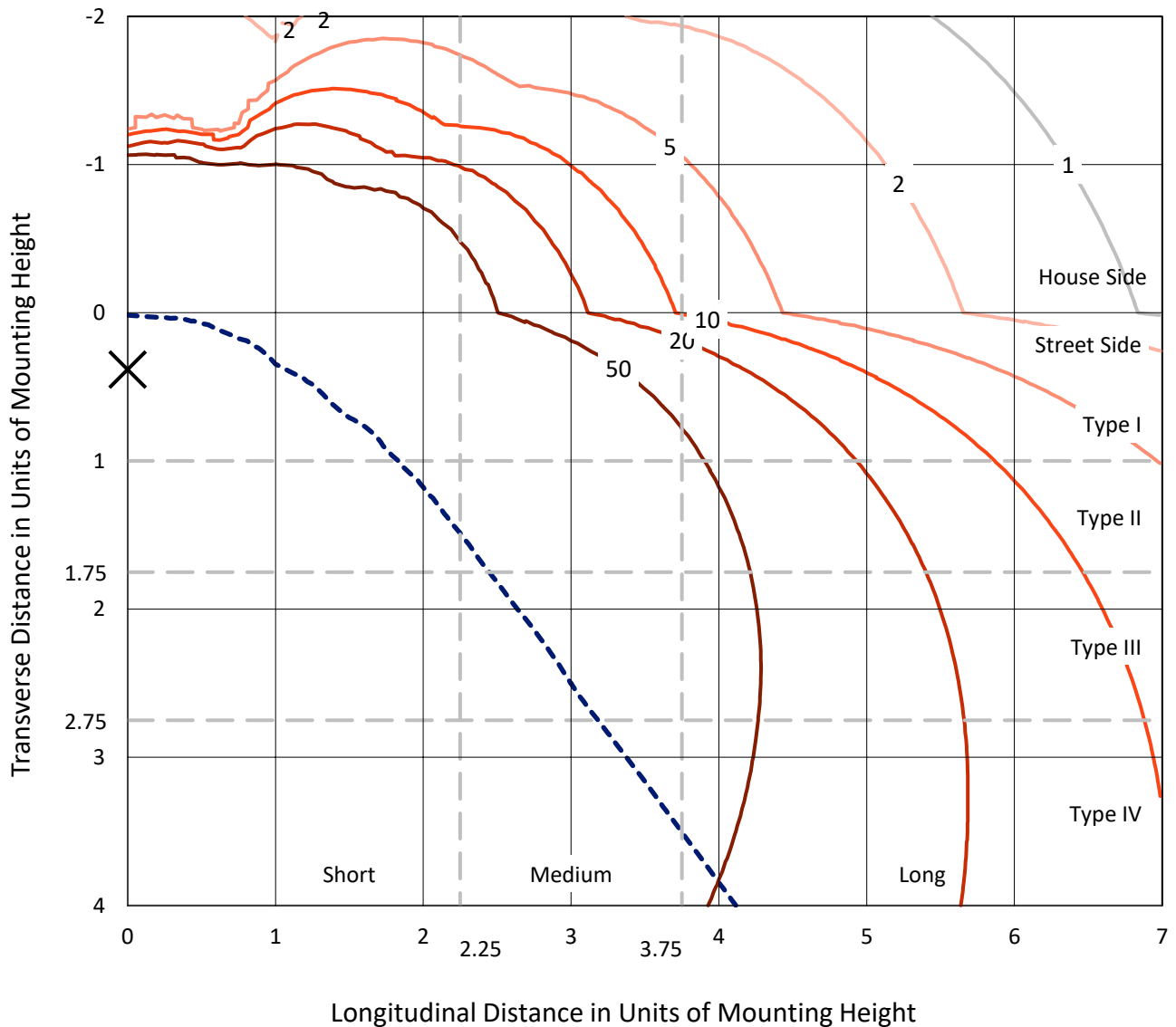




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### Iso-Footcandle Lines of Horizontal Illumination

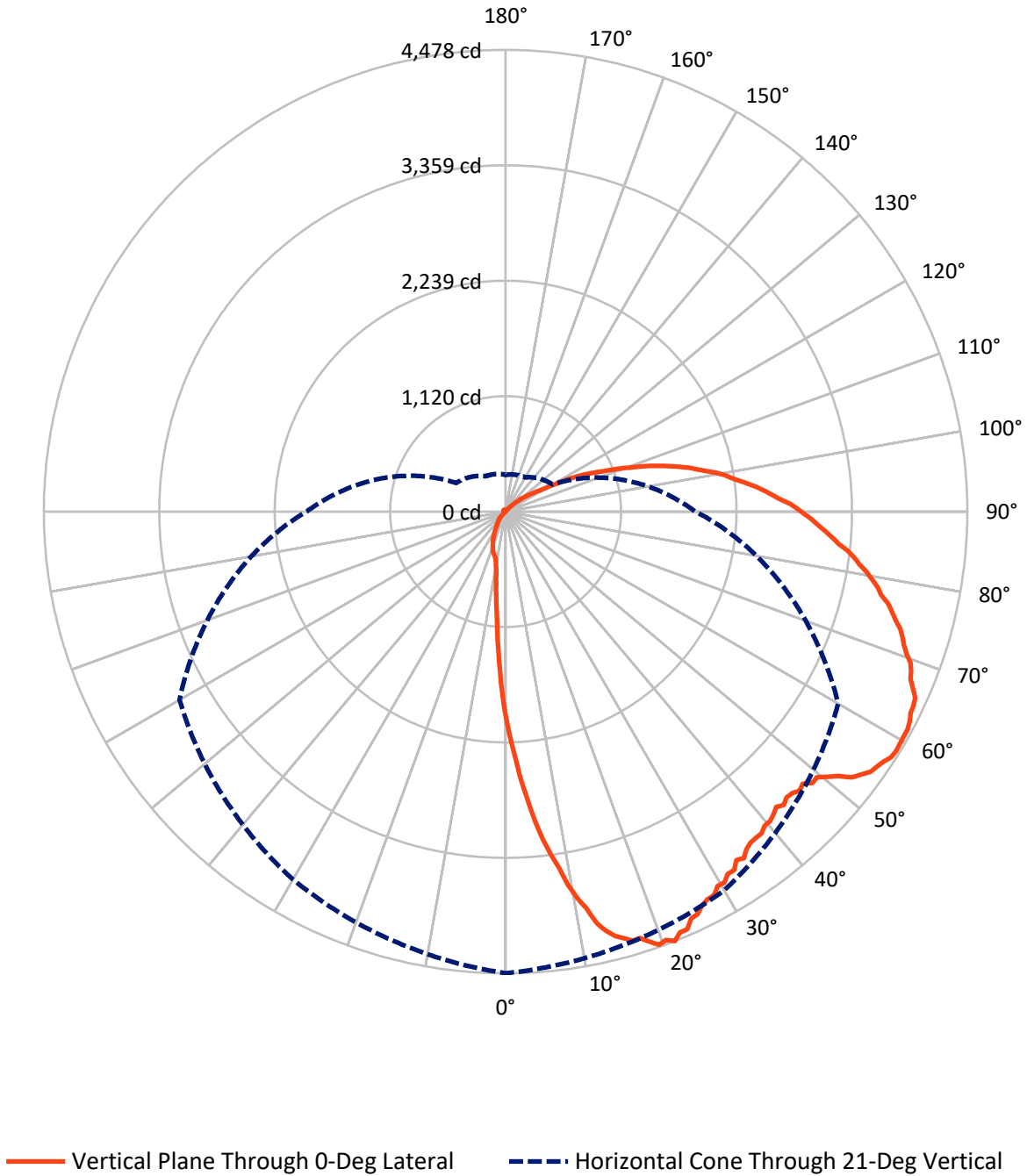
× Max cd  
 - - - 1/2 Max cd



Based on 0.5 foot mounting height. Maximum calculated value = 15535.1 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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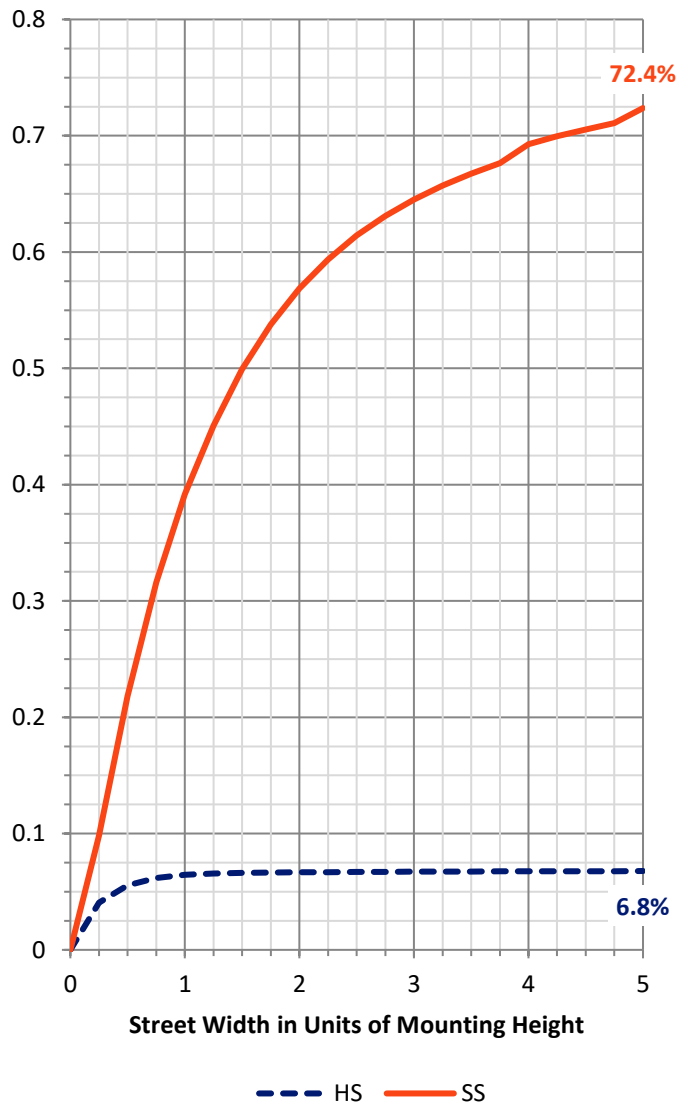
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	745.0	71.5	816.5
	% Fixture	6.9	0.7	7.5
<b>Street Side</b>	Lumens	8550.6	1447.9	9998.5
	% Fixture	79.1	13.4	92.5
<b>Total</b>	Lumens	9295.6	1519.4	10815.0
	% Fixture	86.0	14.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	195.3	1.8
10°-20°	609.7	5.6
20°-30°	986.0	9.1
30°-40°	1194.3	11.0
40°-50°	1282.5	11.9
50°-60°	1373.7	12.7
60°-70°	1381.1	12.8
70°-80°	1252.4	11.6
80°-90°	1020.4	9.4
90°-100°	737.9	6.8
100°-110°	455.5	4.2
110°-120°	206.0	1.9
120°-130°	73.4	0.7
130°-140°	24.8	0.2
140°-150°	10.0	0.1
150°-160°	6.6	0.1
160°-170°	3.9	0.0
170°-180°	1.3	0.0
0°-90°	9295.6	86.0
0°-180°	10815.0	100.0

**Coefficient of Utilization**



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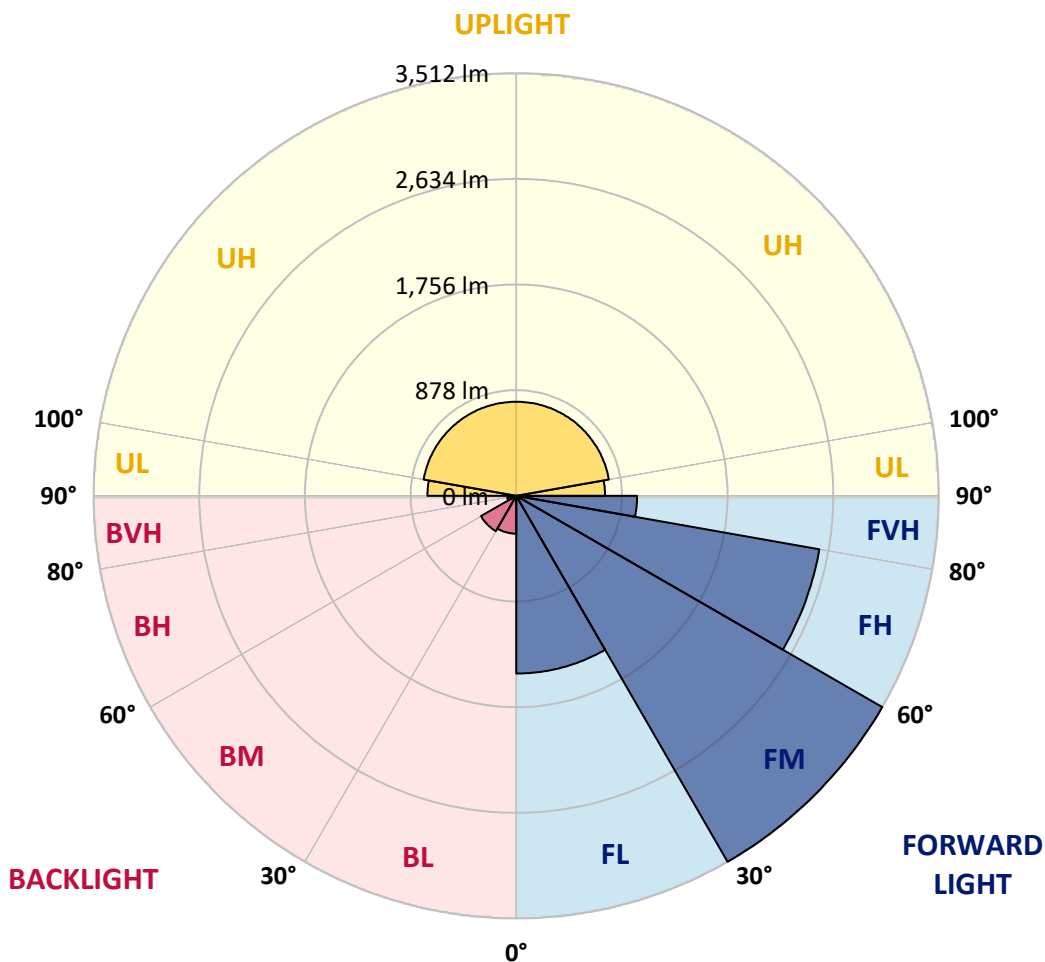
CATALOG NUMBER: WXP120LSFSUNVDBZ-90W-3000K

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1476.8	13.7			
FM (30°-60°)	3512.0	32.5			
FH (60°-80°)	2558.1	23.7			G2/5000
FVH (80°-90°)	1003.7	9.3			G5
BL (0°-30°)	314.3	2.9	B1/500		
BM (30°-60°)	338.5	3.1	B1/1000		
BH (60°-80°)	75.5	0.7	B0/110		G0/110
BVH (80°-90°)	16.7	0.2			G1/100
UL (90°-100°)	737.9	6.8		U4/1000	
UH (100°-180°)	781.5	7.2		U4/1000	

**BUG Rating: B1-U4-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	2065.4	2065.4	2065.4	2065.4	2065.4	2065.4	2065.4	2065.4	2065.4	2065.4	2065.4
1°	2253.2	2244.4	2176.8	2070.6	1975.8	1902.1	1872.0	1881.2	1944.1	2037.1	2124.3
2°	2441.6	2414.1	2276.0	2067.7	1876.1	1739.7	1661.6	1689.4	1853.1	2058.3	2220.6
3°	2648.6	2607.9	2373.4	2054.6	1780.6	1551.1	1445.8	1503.9	1765.6	2083.9	2339.6
4°	2832.8	2773.5	2450.4	2028.2	1668.2	1371.4	1254.4	1327.9	1659.6	2072.3	2456.9
5°	3027.8	2933.2	2508.3	2004.9	1546.2	1198.5	1063.5	1160.1	1530.5	2054.6	2509.3
6°	3200.6	3087.3	2605.7	2004.5	1429.2	1048.8	929.3	1034.9	1414.4	2069.2	2579.6
7°	3351.8	3219.3	2682.7	1973.5	1330.0	930.5	812.2	926.1	1321.6	2087.5	2693.5
8°	3490.0	3336.1	2756.8	1931.1	1223.5	821.5	708.2	821.2	1231.1	2071.7	2827.5
9°	3673.2	3467.6	2809.5	1918.5	1120.1	726.5	622.1	727.9	1136.1	2053.5	2911.4
10°	3809.5	3626.6	2834.8	1935.6	1027.7	647.0	559.8	650.9	1051.1	2030.1	2967.9
11°	3926.8	3759.7	2989.9	1922.2	959.1	584.5	515.6	591.5	983.1	2048.1	3016.3
12°	4091.1	3896.6	3086.8	1911.8	894.7	539.2	482.0	548.6	917.7	2065.9	3058.9
13°	4184.9	3990.3	3150.9	1915.7	834.4	504.0	458.9	516.4	866.1	2054.9	3147.8
14°	4252.0	4103.3	3203.8	1899.7	778.9	474.6	445.3	489.1	813.2	2027.9	3257.2
15°	4293.6	4135.7	3278.9	1906.9	730.7	451.1	435.7	467.1	762.1	2009.7	3369.1
16°	4341.4	4134.3	3379.1	1912.8	686.7	432.6	425.8	450.9	713.3	2007.1	3383.4
17°	4337.3	4124.9	3487.2	1905.5	647.0	420.0	415.4	439.2	671.5	1992.5	3391.5
18°	4398.3	4190.5	3583.3	1878.9	613.6	410.1	404.2	428.3	636.2	1959.9	3433.6
19°	4457.4	4231.9	3620.2	1876.7	583.0	401.6	387.9	417.8	604.7	1957.3	3500.7
20°	4436.0	4245.3	3663.7	1873.9	552.7	392.4	374.7	406.2	578.0	1955.6	3582.3
21°	4478.1	4240.7	3723.9	1840.9	526.1	382.6	356.6	395.4	555.7	1930.6	3651.3
22°	4418.6	4293.6	3798.4	1813.3	501.7	367.2	340.6	378.5	536.7	1923.6	3649.8
23°	4417.5	4313.2	3843.2	1754.1	479.0	355.5	323.1	366.2	517.5	1911.7	3645.2
24°	4337.5	4374.9	3857.1	1735.1	455.8	339.8	305.9	348.3	497.6	1884.9	3649.2
25°	4325.1	4303.1	3864.8	1681.9	433.5	325.0	286.5	333.3	479.4	1874.0	3685.7
26°	4269.2	4280.4	3862.4	1627.3	412.7	310.8	268.6	318.5	462.4	1864.0	3737.5
27°	4240.1	4181.6	3879.0	1594.9	396.4	293.8	249.8	299.3	444.4	1846.2	3754.3
28°	4235.8	4137.8	3921.1	1584.1	382.7	278.9	232.7	281.4	429.5	1838.8	3759.9
29°	4174.5	4100.5	3861.2	1564.2	370.6	261.8	215.6	265.8	416.9	1826.2	3692.6
30°	4177.6	4033.4	3795.0	1525.6	358.8	245.4	200.7	251.5	406.3	1805.4	3628.1
31°	4123.8	4056.7	3761.0	1488.7	347.7	229.7	185.7	237.3	395.6	1769.1	3609.3
32°	4123.3	4059.5	3698.7	1446.1	337.7	215.5	173.4	223.6	385.8	1740.4	3585.5
33°	4055.4	4020.0	3608.6	1403.9	328.4	202.0	160.4	211.4	376.1	1690.7	3590.8
34°	4078.8	3987.7	3605.8	1365.6	318.4	189.5	147.9	199.0	366.2	1645.7	3540.4
35°	4022.7	3963.7	3601.2	1325.3	309.0	177.4	138.2	187.6	354.0	1612.3	3489.0
36°	3994.5	3930.7	3546.9	1280.1	301.0	166.0	128.6	176.3	345.2	1592.3	3463.8
37°	3987.6	3881.2	3516.2	1254.5	293.1	154.4	118.1	165.6	336.4	1556.2	3411.1
38°	3988.4	3838.1	3540.8	1240.1	282.8	143.1	112.3	154.8	324.3	1522.7	3292.0
39°	3948.9	3801.6	3508.7	1245.9	274.7	131.7	109.2	144.5	313.8	1453.5	3231.5
40°	3950.3	3741.4	3475.6	1215.6	265.9	121.3	103.0	134.3	304.1	1413.0	3145.0
41°	3921.3	3714.0	3499.3	1176.3	256.1	111.2	96.2	124.6	292.3	1369.4	3069.4
42°	3885.4	3674.4	3413.5	1111.7	246.5	101.4	89.1	115.1	282.8	1348.4	3012.1
43°	3920.6	3629.8	3270.2	1056.0	236.1	92.0	80.8	105.6	272.3	1330.4	2965.0
44°	3886.8	3632.5	3186.2	1023.5	227.4	83.1	69.7	96.5	261.6	1309.0	2889.0



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CATALOG NUMBER: WXP120LSFSUNVDBZ-90W-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
45°	3897.4	3668.7	3085.1	1040.9	217.7	74.5	57.8	87.1	250.8	1290.3	2834.8
46°	3931.6	3677.5	2970.9	1022.1	209.0	65.9	48.0	77.5	239.9	1253.0	2829.6
47°	3908.3	3602.3	2919.7	989.8	198.9	57.7	34.2	67.7	229.7	1202.8	2802.9
48°	3972.1	3554.8	2914.0	942.1	189.9	50.1	23.9	58.4	219.3	1157.7	2747.1
49°	3968.7	3536.7	2922.6	902.0	179.8	42.0	4.7	48.7	209.3	1125.0	2706.7
50°	4044.9	3517.1	2900.3	884.1	170.2	34.4	3.5	40.1	199.8	1107.9	2666.5
51°	4120.5	3546.5	2907.8	855.7	160.3	25.6	3.7	31.2	190.7	1075.9	2579.7
52°	4232.8	3541.9	2923.9	799.9	151.4	16.8	3.9	21.9	182.0	1022.0	2542.0
53°	4287.8	3554.8	2874.1	757.7	142.1	4.1	4.2	9.0	172.6	966.0	2479.4
54°	4347.3	3595.7	2797.5	739.9	133.9	3.7	4.5	5.4	163.8	936.9	2411.9
55°	4369.5	3621.4	2739.5	703.8	124.7	3.9	4.7	5.4	154.6	925.8	2403.8
56°	4396.7	3643.7	2657.0	654.3	116.6	4.1	5.0	5.6	145.3	887.0	2407.5
57°	4432.9	3639.2	2605.0	614.3	108.8	4.3	5.2	5.9	135.9	840.4	2400.0
58°	4443.4	3655.0	2555.2	584.9	101.4	4.5	5.5	6.1	127.2	807.0	2385.2
59°	4437.4	3648.7	2544.3	554.0	94.2	4.8	5.8	6.3	118.8	764.7	2347.6
60°	4433.8	3635.9	2548.9	518.3	87.1	5.0	6.1	6.6	110.6	712.7	2304.3
61°	4433.7	3602.5	2520.3	481.0	80.6	5.3	6.4	6.9	102.9	668.9	2242.1
62°	4416.4	3606.8	2475.5	448.1	74.0	5.5	6.6	7.2	95.5	628.1	2202.0
63°	4388.7	3590.0	2391.2	410.3	68.1	5.8	7.0	7.5	88.5	590.1	2173.4
64°	4379.5	3573.1	2325.6	374.2	62.6	6.0	7.3	7.8	81.9	551.2	2152.7
65°	4365.1	3560.4	2291.8	338.6	58.3	6.3	7.6	8.1	75.9	512.1	2135.3
66°	4309.9	3550.9	2251.2	308.1	54.7	6.6	7.9	8.4	70.3	474.6	2085.9
67°	4250.6	3534.9	2200.8	279.4	51.8	6.9	8.2	8.8	65.6	439.6	2051.9
68°	4226.6	3506.5	2150.8	250.4	49.2	7.1	8.6	9.0	62.0	406.3	2013.3
69°	4192.9	3467.9	2096.9	228.8	47.2	7.4	8.9	9.3	59.0	376.7	1981.6
70°	4122.8	3444.7	2057.6	209.5	44.7	7.7	9.2	9.5	56.2	349.0	1954.3
71°	4071.0	3406.5	1994.6	192.3	42.5	8.0	9.6	9.9	53.8	321.5	1898.9
72°	4035.2	3376.2	1946.1	177.3	40.5	8.3	9.9	10.1	51.2	295.2	1854.4
73°	3990.5	3336.0	1893.3	163.9	38.5	8.6	10.3	10.4	49.0	270.9	1817.0
74°	3921.1	3301.2	1848.1	151.8	36.6	8.9	10.6	10.6	46.9	248.3	1770.0
75°	3868.3	3248.0	1793.5	139.9	34.6	9.2	11.0	10.7	45.2	226.9	1712.0
76°	3814.7	3198.6	1724.6	129.5	33.2	9.5	11.4	10.9	43.7	207.4	1669.4
77°	3727.7	3155.3	1681.6	119.5	32.2	9.9	11.7	11.0	42.4	189.8	1618.6
78°	3682.7	3110.5	1635.8	110.7	31.5	10.2	12.1	11.3	41.2	172.9	1562.1
79°	3613.2	3063.5	1583.5	102.2	31.0	10.5	12.4	11.5	39.8	157.9	1516.9
80°	3550.7	3012.2	1538.2	94.3	30.6	10.8	12.8	11.7	39.1	143.6	1469.2
81°	3468.2	2967.1	1480.9	86.9	30.2	11.1	13.1	12.0	38.2	130.6	1421.4
82°	3409.0	2912.5	1424.4	80.2	29.8	11.4	13.5	12.3	37.2	118.2	1365.8
83°	3335.1	2849.7	1373.8	74.1	29.5	11.7	13.9	12.5	36.8	107.4	1316.3
84°	3242.1	2787.6	1310.9	68.3	29.2	12.0	14.2	12.8	36.3	98.1	1270.7
85°	3174.6	2719.2	1261.2	62.8	29.0	12.3	14.6	13.2	36.1	89.5	1223.6
86°	3105.4	2658.3	1206.3	57.7	28.7	12.6	15.0	13.5	35.3	81.1	1175.1
87°	3034.1	2597.9	1155.1	53.3	28.3	12.9	15.3	13.8	34.6	73.7	1121.6
88°	2970.5	2534.6	1104.5	49.3	28.0	13.2	15.7	14.1	35.8	67.0	1071.6
89°	2899.7	2462.4	1049.4	46.3	27.9	13.5	16.0	14.3	35.8	61.2	1023.3





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**CANDELA DISTRIBUTION (continued):**

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
90°	2835.0	2393.8	1000.0	43.9	27.5	13.8	16.3	14.6	35.6	56.2	970.3
91°	2763.8	2329.4	949.8	41.9	27.2	14.1	16.7	14.9	35.3	52.5	922.2
92°	2671.6	2262.6	894.6	40.4	27.1	14.4	17.0	15.1	33.9	50.2	872.8
93°	2593.0	2197.1	847.9	39.5	26.8	14.6	17.2	15.3	33.5	48.5	829.1
94°	2525.2	2126.6	797.6	39.1	26.6	14.9	17.5	15.3	33.3	47.2	783.8
95°	2449.9	2058.7	753.7	39.1	26.3	15.1	17.8	15.4	32.9	46.4	742.9
96°	2367.1	1984.1	709.7	39.3	26.0	15.4	18.0	15.5	32.7	46.1	699.2
97°	2288.1	1911.6	667.0	39.9	25.8	15.6	18.3	15.6	32.3	45.9	654.3
98°	2212.2	1837.1	632.4	40.6	25.4	15.8	18.5	15.8	31.9	45.9	615.6
99°	2148.4	1762.1	594.8	41.1	25.1	16.0	18.7	15.8	31.5	46.1	580.1
100°	2069.7	1691.6	559.5	41.6	24.9	16.2	18.9	15.9	31.1	46.5	547.0
101°	1980.3	1614.4	528.4	42.1	24.5	16.4	19.0	16.1	30.9	47.0	514.7
102°	1896.6	1530.4	494.3	42.6	24.1	16.6	19.2	16.3	30.5	47.6	484.2
103°	1822.1	1457.4	464.4	43.1	23.7	16.8	19.3	16.5	30.1	48.2	454.6
104°	1736.9	1382.7	436.6	43.5	23.4	17.0	19.5	16.6	29.8	48.8	427.4
105°	1648.6	1306.5	406.3	43.9	23.1	17.1	19.6	16.8	29.3	49.4	399.5
106°	1556.8	1239.4	381.3	44.1	22.9	17.3	19.7	17.0	29.2	49.9	368.8
107°	1473.3	1169.5	355.8	44.2	22.6	17.4	19.7	17.2	29.0	50.3	335.4
108°	1379.5	1106.3	330.4	44.3	22.4	17.6	19.7	17.3	28.6	50.7	303.8
109°	1280.4	1035.7	306.1	44.2	22.2	17.7	19.8	17.5	28.2	51.0	271.5
110°	1192.2	967.4	280.8	44.2	22.0	17.9	19.8	17.6	27.8	51.2	240.9
111°	1107.3	900.3	257.3	44.1	21.8	18.0	19.9	17.7	27.4	51.3	215.9
112°	1024.7	828.4	237.4	43.9	21.5	18.2	20.0	17.9	27.0	51.2	194.4
113°	953.4	748.0	218.3	43.7	21.3	18.3	20.0	18.1	26.6	50.9	175.7
114°	884.3	667.9	201.0	43.4	21.1	18.4	20.1	18.2	26.1	50.6	158.3
115°	820.9	577.6	184.5	43.2	21.0	18.6	20.1	18.4	25.7	50.3	144.1
116°	749.0	497.2	169.3	43.0	20.9	18.7	20.1	18.6	25.4	50.1	129.6
117°	674.9	430.3	155.2	42.6	20.8	18.8	20.2	18.7	25.1	49.7	117.6
118°	588.2	370.9	142.8	42.3	20.7	19.0	20.2	18.9	24.8	49.3	107.8
119°	512.8	330.2	131.6	41.9	20.5	19.1	20.3	19.0	24.5	48.8	99.0
120°	449.3	300.9	121.7	41.2	20.4	19.3	20.3	19.1	24.3	47.9	90.9
121°	401.2	273.1	113.2	40.5	20.4	19.4	20.4	19.3	24.0	46.7	83.3
122°	366.6	248.9	107.1	39.6	20.4	19.5	20.4	19.4	23.7	45.4	77.0
123°	335.5	229.2	100.6	38.6	20.3	19.7	20.5	19.5	23.5	43.9	69.7
124°	305.4	207.3	92.6	37.6	20.3	19.8	20.5	19.7	23.3	42.3	62.0
125°	278.6	190.1	84.0	36.4	20.2	19.9	20.6	19.8	23.1	40.6	54.4
126°	252.3	169.2	77.3	35.2	20.1	20.1	20.7	19.9	22.9	39.0	48.4
127°	229.1	150.8	71.3	34.0	20.0	20.2	20.8	20.1	22.7	37.4	44.1
128°	207.5	133.4	65.7	32.7	20.0	20.3	20.8	20.2	22.4	35.9	40.0
129°	184.6	116.5	60.3	31.3	19.9	20.4	20.9	20.3	22.1	34.4	36.2
130°	163.9	102.7	55.2	29.9	19.9	20.5	21.0	20.5	21.8	32.8	32.3
131°	143.9	89.7	49.5	28.5	19.8	20.7	21.1	20.6	21.5	31.2	28.8
132°	121.5	78.1	44.0	27.3	19.7	20.8	21.2	20.7	21.2	29.5	25.7
133°	100.9	68.9	39.2	26.1	19.6	20.9	21.3	20.8	20.8	27.8	23.1
134°	85.8	60.3	34.8	24.9	19.5	21.0	21.4	20.9	20.4	25.9	20.8



REPORT NUMBER: P670584  
 CATALOG NUMBER: WXP120LSFSUNVDBZ-90W-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
135°	71.9	52.0	31.4	23.9	19.4	21.0	21.4	21.0	19.8	24.0	19.2
136°	60.9	44.5	28.4	22.9	19.2	21.1	21.5	21.0	19.3	22.1	16.6
137°	51.6	38.4	25.3	22.0	19.1	21.2	21.6	21.1	18.6	20.1	13.8
138°	43.4	33.0	22.7	21.2	19.0	21.2	21.7	21.2	17.9	18.4	11.9
139°	36.0	27.5	21.4	20.5	18.8	21.3	21.7	21.2	17.3	16.8	11.3
140°	28.9	21.7	20.3	19.8	18.6	21.3	21.8	21.3	17.1	15.4	10.9
141°	22.7	17.9	19.4	19.1	18.5	21.3	21.9	21.2	16.9	14.1	10.7
142°	18.3	16.7	18.8	18.4	18.3	21.3	21.9	21.1	16.7	13.0	10.7
143°	14.1	15.2	18.4	17.6	18.1	21.2	21.9	21.1	16.6	12.2	11.0
144°	7.6	14.7	18.0	16.9	17.8	21.2	21.9	21.0	16.6	11.7	11.6
145°	5.5	14.9	17.4	16.2	17.5	21.1	21.9	20.9	16.6	11.6	12.4
146°	5.3	14.5	17.4	15.4	17.3	21.1	21.9	20.8	16.5	11.6	13.0
147°	5.2	13.2	17.5	14.6	17.3	21.0	21.8	20.7	16.3	11.7	13.6
148°	5.2	12.3	17.8	13.9	17.3	20.9	21.7	20.6	16.1	11.8	14.2
149°	5.3	11.7	18.2	13.4	17.3	20.8	21.6	20.4	15.9	12.0	14.5
150°	5.3	11.3	18.7	13.2	17.3	20.6	21.5	20.2	15.8	12.1	15.0
151°	5.1	10.8	19.4	13.1	17.3	20.5	21.4	20.0	15.8	12.2	14.2
152°	4.9	9.6	18.8	13.1	17.3	20.4	21.2	19.8	15.7	12.4	13.3
153°	4.8	8.9	17.6	13.2	17.3	20.2	21.0	19.7	15.6	12.5	12.5
154°	5.1	9.4	16.5	13.4	17.2	20.0	20.8	19.6	15.5	12.6	11.9
155°	5.3	10.0	15.4	13.5	17.2	19.8	20.6	19.4	15.4	12.8	11.2
156°	5.5	10.6	14.0	13.6	17.2	19.7	20.3	19.1	15.4	12.9	11.3
157°	5.9	11.1	13.5	13.8	17.2	19.5	20.1	18.8	15.3	13.0	11.3
158°	6.5	11.5	13.3	13.9	17.1	19.3	19.8	18.5	15.3	13.1	11.4
159°	7.1	11.6	13.1	14.0	17.1	19.1	19.5	18.4	15.2	13.2	11.5
160°	7.6	11.8	12.9	14.1	17.1	18.9	19.3	18.1	15.1	13.4	11.6
161°	8.0	11.8	12.8	14.2	17.0	18.7	19.0	17.8	14.9	13.5	11.8
162°	8.3	12.0	12.6	14.2	16.9	18.4	18.7	17.6	14.9	13.6	11.9
163°	8.7	12.0	12.6	14.3	16.9	18.3	18.4	17.5	14.8	13.7	12.0
164°	8.8	11.2	12.5	14.4	16.8	18.0	18.1	17.2	14.7	13.8	12.1
165°	9.0	10.6	12.5	14.5	16.7	17.8	17.8	16.8	14.7	13.9	12.3
166°	9.0	9.7	12.4	14.6	16.6	17.6	17.5	16.5	14.6	14.0	12.4
167°	9.1	9.9	11.9	14.6	16.5	17.4	17.2	16.3	14.4	14.1	12.5
168°	9.2	10.0	11.6	14.7	16.4	17.2	16.9	16.0	14.3	14.2	12.6
169°	9.6	10.2	11.7	14.8	16.2	16.9	16.6	15.7	14.2	14.2	12.7
170°	10.0	10.4	11.7	14.8	16.1	16.7	16.3	15.5	14.1	14.3	12.9
171°	10.4	10.7	11.8	14.8	16.0	16.4	15.9	15.2	13.9	14.4	13.0
172°	10.8	11.0	12.0	14.9	15.8	16.2	15.6	15.0	13.7	14.5	13.1
173°	11.2	11.2	12.0	14.9	15.7	15.9	15.3	14.7	13.6	14.5	13.2
174°	11.6	11.5	12.2	15.0	15.5	15.6	15.0	14.4	13.4	14.6	13.4
175°	12.0	11.8	12.1	15.0	15.3	15.3	14.6	14.1	13.1	14.6	13.6
176°	12.3	12.0	12.0	15.0	15.2	15.0	14.2	13.8	12.4	14.7	13.8
177°	12.7	12.2	11.9	15.0	15.0	14.7	13.9	13.5	12.3	14.8	14.0
178°	12.8	12.2	11.9	15.0	14.8	14.4	13.5	13.0	12.1	14.8	14.2
179°	12.9	12.3	11.9	14.9	14.6	14.1	13.2	12.5	12.0	14.9	14.3



REPORT NUMBER: P670584  
CATALOG NUMBER: WXPM120LSFSUNVDBZ-90W-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
180°	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9



REPORT NUMBER: P670584  
CATALOG NUMBER: WXPM120LSFSUNVDBZ-90W-3000K

**CANDELA DISTRIBUTION (continued):**

	330°	360°
0°	2065.4	2065.4
1°	2203.3	2253.2
2°	2350.2	2441.6
3°	2529.7	2648.6
4°	2709.4	2832.8
5°	2915.4	3027.8
6°	3066.7	3200.6
7°	3194.0	3351.8
8°	3307.8	3490.0
9°	3387.9	3673.2
10°	3521.9	3809.5
11°	3635.1	3926.8
12°	3706.4	4091.1
13°	3875.2	4184.9
14°	3996.1	4252.0
15°	4157.0	4293.6
16°	4203.0	4341.4
17°	4234.7	4337.3
18°	4235.5	4398.3
19°	4147.3	4457.4
20°	4112.6	4436.0
21°	4121.4	4478.1
22°	4167.3	4418.6
23°	4227.3	4417.5
24°	4241.6	4337.5
25°	4230.0	4325.1
26°	4167.1	4269.2
27°	4079.0	4240.1
28°	3996.1	4235.8
29°	3910.6	4174.5
30°	3897.1	4177.6
31°	3907.0	4123.8
32°	3872.1	4123.3
33°	3813.7	4055.4
34°	3757.2	4078.8
35°	3683.1	4022.7
36°	3626.6	3994.5
37°	3557.1	3987.6
38°	3533.3	3988.4
39°	3498.9	3948.9
40°	3499.9	3950.3
41°	3476.9	3921.3
42°	3464.5	3885.4
43°	3391.0	3920.6
44°	3366.7	3886.8



REPORT NUMBER: P670584  
CATALOG NUMBER: WXPM120LSFSUNVDBZ-90W-3000K

**CANDELA DISTRIBUTION (continued):**

	330°	360°
45°	3333.4	3897.4
46°	3295.8	3931.6
47°	3284.5	3908.3
48°	3279.9	3972.1
49°	3259.7	3968.7
50°	3273.4	4044.9
51°	3279.9	4120.5
52°	3278.6	4232.8
53°	3303.9	4287.8
54°	3323.3	4347.3
55°	3358.0	4369.5
56°	3386.3	4396.7
57°	3415.6	4432.9
58°	3435.9	4443.4
59°	3434.6	4437.4
60°	3430.6	4433.8
61°	3430.1	4433.7
62°	3424.4	4416.4
63°	3417.9	4388.7
64°	3410.2	4379.5
65°	3391.6	4365.1
66°	3377.1	4309.9
67°	3364.9	4250.6
68°	3359.9	4226.6
69°	3338.5	4192.9
70°	3316.2	4122.8
71°	3277.5	4071.0
72°	3253.5	4035.2
73°	3214.1	3990.5
74°	3175.7	3921.1
75°	3137.5	3868.3
76°	3096.4	3814.7
77°	3044.4	3727.7
78°	2998.5	3682.7
79°	2952.2	3613.2
80°	2889.8	3550.7
81°	2835.1	3468.2
82°	2779.7	3409.0
83°	2710.8	3335.1
84°	2645.1	3242.1
85°	2577.4	3174.6
86°	2514.1	3105.4
87°	2446.7	3034.1
88°	2382.4	2970.5
89°	2317.0	2899.7



REPORT NUMBER: P670584  
CATALOG NUMBER: WXPM120LSFSUNVDBZ-90W-3000K

**CANDELA DISTRIBUTION (continued):**

	330°	360°
90°	2244.7	2835.0
91°	2182.4	2763.8
92°	2118.9	2671.6
93°	2046.0	2593.0
94°	1977.3	2525.2
95°	1910.6	2449.9
96°	1840.3	2367.1
97°	1772.7	2288.1
98°	1701.8	2212.2
99°	1633.4	2148.4
100°	1561.2	2069.7
101°	1490.3	1980.3
102°	1412.9	1896.6
103°	1338.4	1822.1
104°	1266.8	1736.9
105°	1193.6	1648.6
106°	1115.6	1556.8
107°	1039.2	1473.3
108°	967.0	1379.5
109°	893.5	1280.4
110°	829.1	1192.2
111°	766.7	1107.3
112°	706.0	1024.7
113°	644.6	953.4
114°	585.4	884.3
115°	514.7	820.9
116°	443.6	749.0
117°	386.0	674.9
118°	339.9	588.2
119°	304.3	512.8
120°	276.3	449.3
121°	250.5	401.2
122°	227.0	366.6
123°	206.2	335.5
124°	186.1	305.4
125°	167.5	278.6
126°	148.3	252.3
127°	131.1	229.1
128°	113.8	207.5
129°	96.7	184.6
130°	82.3	163.9
131°	69.5	143.9
132°	58.4	121.5
133°	49.6	100.9
134°	41.7	85.8



REPORT NUMBER: P670584  
CATALOG NUMBER: WXPM120LSFSUNVDBZ-90W-3000K

**CANDELA DISTRIBUTION (continued):**

	330°	360°
135°	35.1	71.9
136°	29.0	60.9
137°	24.1	51.6
138°	19.9	43.4
139°	15.2	36.0
140°	9.9	28.9
141°	8.0	22.7
142°	7.9	18.3
143°	8.0	14.1
144°	8.6	7.6
145°	8.9	5.5
146°	8.6	5.3
147°	8.0	5.2
148°	7.7	5.2
149°	7.4	5.3
150°	7.3	5.3
151°	6.9	5.1
152°	6.7	4.9
153°	7.3	4.8
154°	7.6	5.1
155°	7.9	5.3
156°	8.3	5.5
157°	8.7	5.9
158°	8.9	6.5
159°	8.9	7.1
160°	9.1	7.6
161°	9.2	8.0
162°	9.3	8.3
163°	9.2	8.7
164°	9.2	8.8
165°	9.4	9.0
166°	9.7	9.0
167°	10.0	9.1
168°	10.3	9.2
169°	10.7	9.6
170°	11.0	10.0
171°	11.4	10.4
172°	11.8	10.8
173°	12.1	11.2
174°	12.5	11.6
175°	12.8	12.0
176°	13.1	12.3
177°	13.4	12.7
178°	13.6	12.8
179°	13.8	12.9



REPORT NUMBER: P670584  
CATALOG NUMBER: WXPM120LSFSUNVDBZ-90W-3000K

**CANDELA DISTRIBUTION (continued):**

	330°	360°
180°	12.9	12.9

(END OF REPORT)