

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: P670585

Luminaire Tested: WXPM120LSFSUNVDBZ-90W-4000K

Issue Date: 4/4/2023

Test Information

Test Method: LM-79-2019
Report Number: P670585
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: WXPM120LSFSUNVDBZ-90W-4000K
Description: WALL PACK
Light Source:
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12027 lumens
Efficiency: N/A
Efficacy: 138.2 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

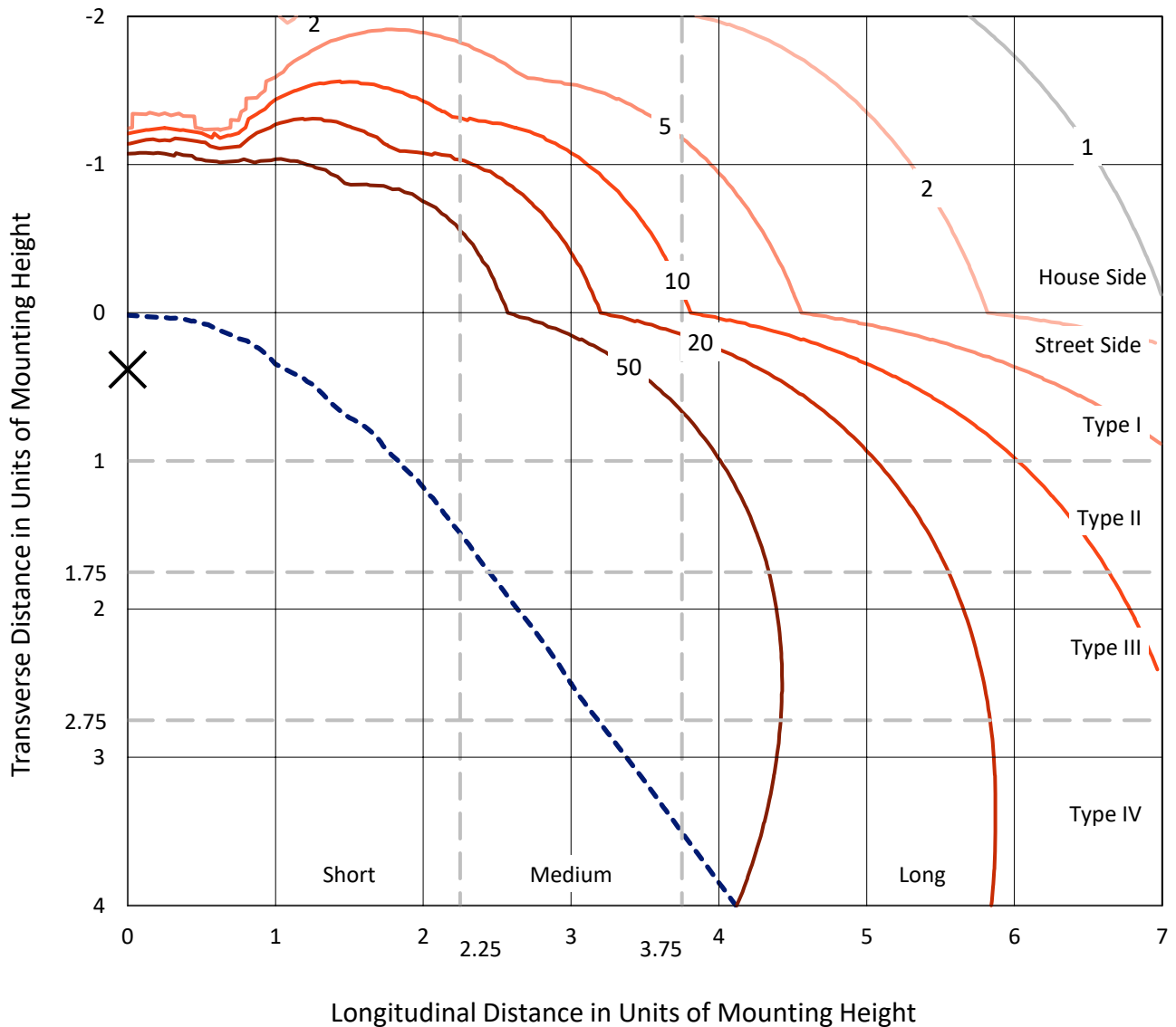
Input Watts (W): 87
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

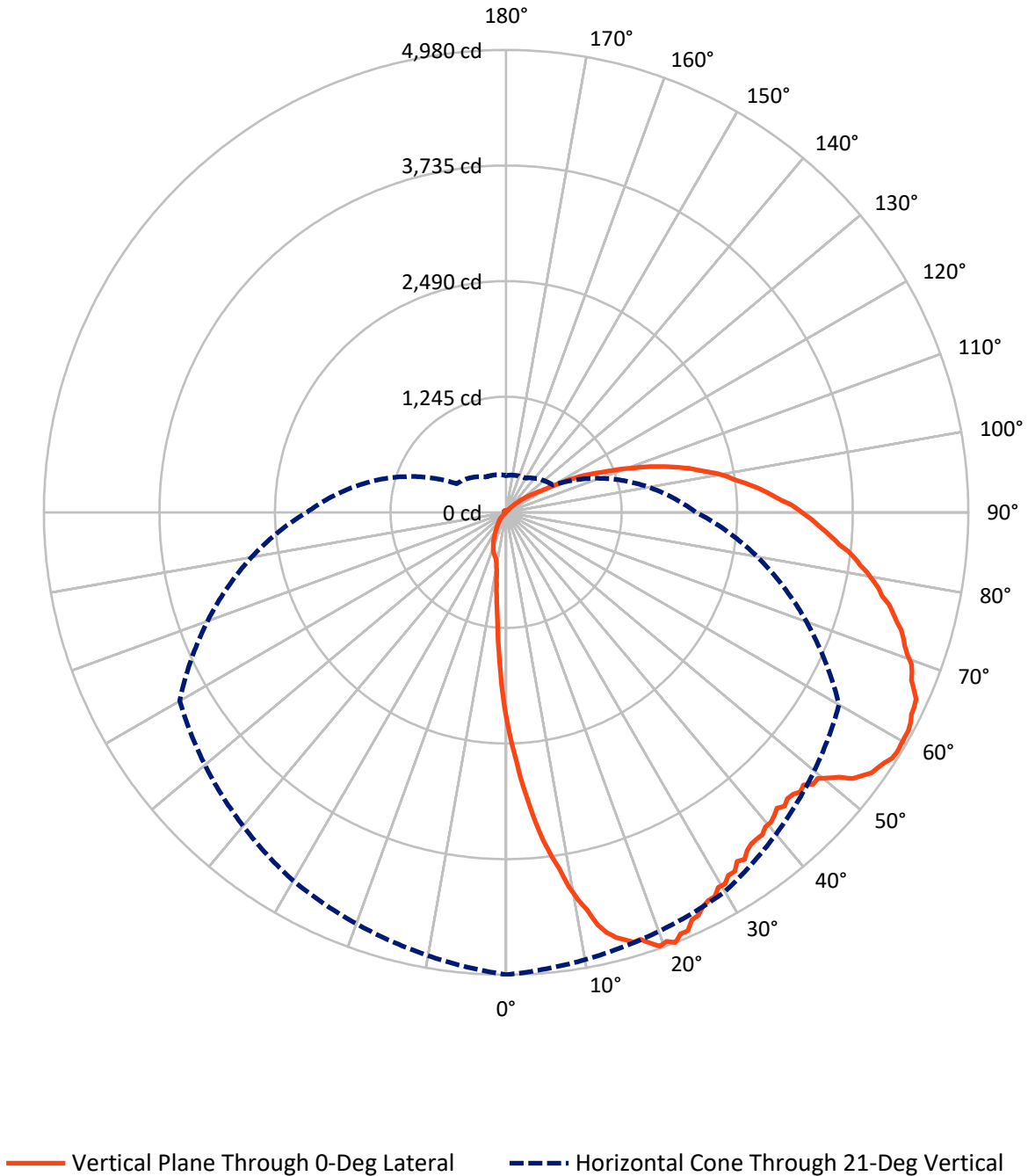
× Max cd
 - - - 1/2 Max cd



Based on 0.5 foot mounting height. Maximum calculated value = 17276.4 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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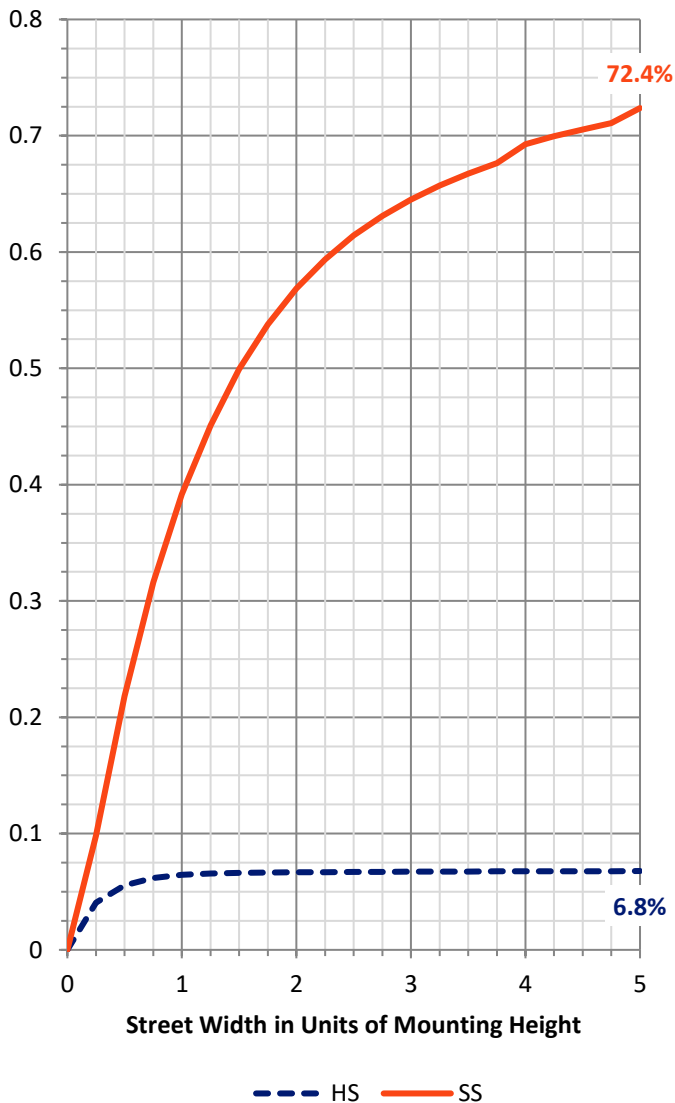
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	828.5	79.5	908.0
	% Fixture	6.9	0.7	7.5
Street Side	Lumens	9508.8	1610.2	11119.0
	% Fixture	79.1	13.4	92.5
Total	Lumens	10337.3	1689.7	12027.0
	% Fixture	86.0	14.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.2	1.8
10°-20°	678.1	5.6
20°-30°	1096.5	9.1
30°-40°	1328.1	11.0
40°-50°	1426.3	11.9
50°-60°	1527.6	12.7
60°-70°	1535.9	12.8
70°-80°	1392.8	11.6
80°-90°	1134.8	9.4
90°-100°	820.5	6.8
100°-110°	506.5	4.2
110°-120°	229.1	1.9
120°-130°	81.6	0.7
130°-140°	27.6	0.2
140°-150°	11.2	0.1
150°-160°	7.3	0.1
160°-170°	4.4	0.0
170°-180°	1.5	0.0
0°-90°	10337.3	86.0
0°-180°	12027.0	100.0

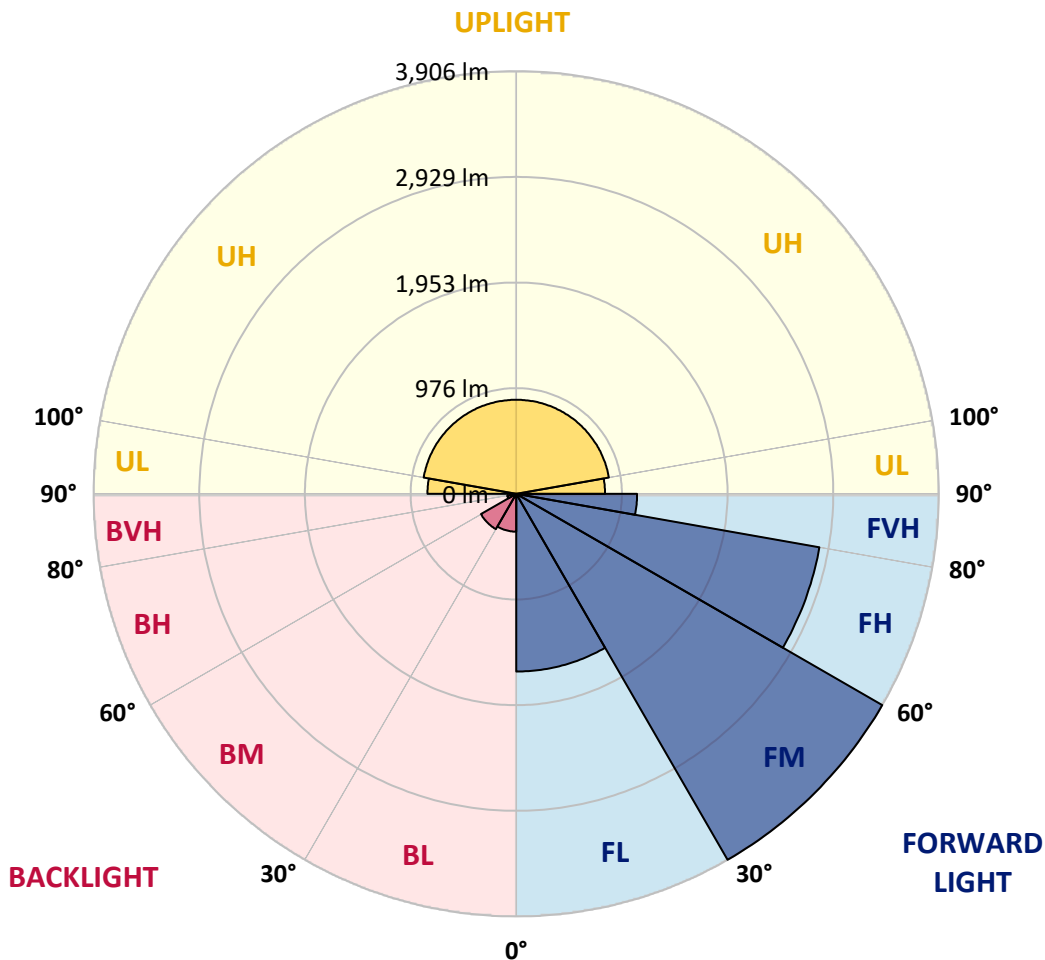


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1642.3	13.7			
FM (30°-60°)	3905.6	32.5			
FH (60°-80°)	2844.8	23.7			G2/5000
FVH (80°-90°)	1116.2	9.3			G5
BL (0°-30°)	349.5	2.9	B1/500		
BM (30°-60°)	376.5	3.1	B1/1000		
BH (60°-80°)	84.0	0.7	B0/110		G0/110
BVH (80°-90°)	18.6	0.2			G1/100
UL (90°-100°)	820.5	6.8		U4/1000	
UH (100°-180°)	869.1	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°	2296.8	2296.8	2296.8	2296.8	2296.8	2296.8	2296.8	2296.8	2296.8	2296.8	2296.8
1°	2505.7	2496.0	2420.7	2302.6	2197.3	2115.3	2081.8	2092.1	2162.0	2265.4	2362.3
2°	2715.3	2684.6	2531.1	2299.4	2086.4	1934.6	1847.8	1878.7	2060.7	2289.0	2469.4
3°	2945.4	2900.2	2639.4	2284.9	1980.2	1725.0	1607.8	1672.5	1963.5	2317.5	2601.8
4°	3150.2	3084.3	2725.0	2255.5	1855.2	1525.1	1395.0	1476.8	1845.6	2304.5	2732.2
5°	3367.1	3261.9	2789.4	2229.6	1719.4	1332.8	1182.7	1290.1	1702.0	2284.8	2790.5
6°	3559.3	3433.3	2897.7	2229.1	1589.3	1166.4	1033.4	1150.8	1572.9	2301.1	2868.7
7°	3727.5	3580.1	2983.3	2194.7	1479.0	1034.8	903.2	1029.9	1469.7	2321.4	2995.3
8°	3881.1	3709.9	3065.8	2147.5	1360.7	913.6	787.6	913.2	1369.0	2303.8	3144.4
9°	4084.8	3856.2	3124.4	2133.5	1245.6	807.9	691.8	809.4	1263.4	2283.6	3237.7
10°	4236.4	4033.0	3152.4	2152.5	1142.9	719.5	622.5	723.8	1168.9	2257.6	3300.5
11°	4366.9	4181.1	3325.0	2137.6	1066.6	650.0	573.3	657.8	1093.3	2277.6	3354.3
12°	4549.6	4333.2	3432.7	2126.0	995.0	599.6	536.0	610.0	1020.6	2297.4	3401.7
13°	4653.9	4437.4	3504.0	2130.3	927.9	560.5	510.4	574.3	963.1	2285.2	3500.6
14°	4728.6	4563.1	3562.9	2112.6	866.2	527.8	495.2	543.9	904.3	2255.2	3622.2
15°	4774.8	4599.2	3646.4	2120.6	812.6	501.6	484.5	519.5	847.5	2234.9	3746.7
16°	4828.0	4597.7	3757.8	2127.1	763.7	481.1	473.5	501.4	793.2	2232.0	3762.6
17°	4823.3	4587.2	3878.0	2119.1	719.5	467.0	461.9	488.4	746.7	2215.8	3771.6
18°	4891.2	4660.1	3984.9	2089.5	682.4	456.1	449.5	476.3	707.5	2179.6	3818.4
19°	4957.0	4706.1	4025.9	2087.0	648.4	446.6	431.4	464.6	672.4	2176.7	3893.0
20°	4933.2	4721.0	4074.3	2083.9	614.6	436.4	416.7	451.8	642.8	2174.8	3983.7
21°	4979.9	4716.0	4141.2	2047.2	585.0	425.5	396.6	439.7	618.0	2147.0	4060.5
22°	4913.8	4774.8	4224.1	2016.5	557.9	408.4	378.8	421.0	596.8	2139.2	4058.8
23°	4912.5	4796.6	4273.9	1950.6	532.7	395.4	359.3	407.2	575.5	2125.9	4053.7
24°	4823.6	4865.2	4289.3	1929.6	506.9	377.8	340.2	387.4	553.4	2096.2	4058.1
25°	4809.8	4785.4	4297.9	1870.4	482.1	361.4	318.6	370.7	533.2	2084.1	4098.8
26°	4747.6	4760.1	4295.3	1809.6	459.0	345.6	298.7	354.1	514.2	2072.9	4156.4
27°	4715.3	4650.2	4313.7	1773.6	440.9	326.7	277.8	332.9	494.2	2053.1	4175.0
28°	4710.5	4601.5	4360.5	1761.7	425.5	310.1	258.8	312.9	477.7	2044.8	4181.3
29°	4642.3	4560.0	4293.9	1739.5	412.1	291.2	239.8	295.6	463.7	2030.9	4106.5
30°	4645.8	4485.4	4220.3	1696.5	399.0	272.9	223.2	279.7	451.9	2007.7	4034.7
31°	4585.9	4511.3	4182.5	1655.6	386.7	255.5	206.5	263.8	439.9	1967.3	4013.8
32°	4585.3	4514.4	4113.2	1608.2	375.6	239.6	192.8	248.6	429.1	1935.5	3987.4
33°	4509.9	4470.5	4012.9	1561.2	365.2	224.6	178.4	235.1	418.3	1880.1	3993.2
34°	4535.9	4434.5	4009.9	1518.6	354.1	210.8	164.4	221.3	407.2	1830.1	3937.2
35°	4473.5	4407.9	4004.8	1473.8	343.6	197.3	153.7	208.6	393.6	1793.0	3880.0
36°	4442.1	4371.2	3944.4	1423.6	334.8	184.6	143.0	196.0	383.9	1770.7	3852.0
37°	4434.5	4316.1	3910.2	1395.0	325.9	171.7	131.4	184.1	374.1	1730.6	3793.3
38°	4435.4	4268.2	3937.6	1379.1	314.5	159.1	124.9	172.1	360.6	1693.4	3660.9
39°	4391.5	4227.6	3901.9	1385.5	305.5	146.5	121.5	160.7	349.0	1616.4	3593.7
40°	4393.0	4160.7	3865.1	1351.8	295.7	134.9	114.5	149.4	338.2	1571.4	3497.4
41°	4360.7	4130.2	3891.5	1308.1	284.8	123.6	107.0	138.6	325.1	1522.9	3413.3
42°	4320.8	4086.1	3796.0	1236.3	274.1	112.8	99.1	128.0	314.5	1499.5	3349.7
43°	4360.0	4036.6	3636.7	1174.3	262.5	102.3	89.9	117.4	302.8	1479.5	3297.3
44°	4322.4	4039.6	3543.3	1138.2	252.9	92.4	77.5	107.3	290.9	1455.7	3212.8



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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
45°	4334.2	4079.9	3430.8	1157.5	242.1	82.9	64.3	96.9	278.9	1434.9	3152.5
46°	4372.2	4089.6	3303.8	1136.6	232.4	73.3	53.4	86.2	266.8	1393.5	3146.7
47°	4346.3	4006.0	3246.9	1100.8	221.2	64.1	38.0	75.3	255.5	1337.6	3117.0
48°	4417.2	3953.1	3240.6	1047.7	211.2	55.7	26.6	64.9	243.8	1287.5	3054.9
49°	4413.5	3933.1	3250.2	1003.1	200.0	46.7	5.3	54.2	232.7	1251.1	3010.0
50°	4498.2	3911.3	3225.3	983.1	189.3	38.3	3.9	44.6	222.2	1232.0	2965.3
51°	4582.2	3944.0	3233.7	951.6	178.2	28.5	4.1	34.6	212.1	1196.5	2868.8
52°	4707.1	3938.8	3251.6	889.5	168.3	18.7	4.4	24.3	202.4	1136.6	2826.9
53°	4768.3	3953.2	3196.2	842.6	158.0	4.6	4.7	10.0	191.9	1074.3	2757.3
54°	4834.4	3998.7	3111.0	822.8	148.9	4.1	5.0	6.0	182.2	1041.9	2682.2
55°	4859.1	4027.3	3046.5	782.7	138.7	4.3	5.2	6.1	171.9	1029.5	2673.2
56°	4889.5	4052.0	2954.7	727.6	129.6	4.6	5.5	6.3	161.5	986.4	2677.2
57°	4929.7	4047.1	2896.9	683.1	121.0	4.8	5.8	6.6	151.1	934.5	2669.0
58°	4941.3	4064.6	2841.5	650.5	112.7	5.1	6.1	6.8	141.5	897.5	2652.5
59°	4934.7	4057.6	2829.4	616.1	104.7	5.3	6.4	7.0	132.1	850.4	2610.7
60°	4930.7	4043.4	2834.5	576.3	96.9	5.6	6.8	7.3	123.0	792.6	2562.5
61°	4930.6	4006.2	2802.8	534.9	89.6	5.9	7.1	7.7	114.5	743.8	2493.4
62°	4911.4	4011.0	2752.9	498.3	82.2	6.1	7.4	8.0	106.2	698.5	2448.8
63°	4880.5	3992.3	2659.2	456.3	75.8	6.4	7.7	8.3	98.4	656.2	2416.9
64°	4870.3	3973.6	2586.2	416.1	69.7	6.7	8.1	8.7	91.1	613.0	2394.0
65°	4854.3	3959.4	2548.7	376.6	64.8	7.0	8.4	9.0	84.4	569.5	2374.6
66°	4792.9	3948.9	2503.4	342.7	60.8	7.3	8.8	9.4	78.2	527.8	2319.7
67°	4727.0	3931.0	2447.5	310.7	57.6	7.6	9.2	9.7	72.9	488.9	2281.9
68°	4700.2	3899.5	2391.8	278.5	54.7	7.9	9.5	10.0	69.0	451.8	2238.9
69°	4662.8	3856.6	2331.9	254.5	52.4	8.3	9.9	10.3	65.6	418.9	2203.7
70°	4584.8	3830.8	2288.2	233.0	49.7	8.6	10.3	10.6	62.5	388.1	2173.4
71°	4527.3	3788.3	2218.2	213.8	47.3	8.9	10.7	11.0	59.8	357.5	2111.7
72°	4487.5	3754.5	2164.2	197.2	45.1	9.2	11.0	11.2	56.9	328.3	2062.2
73°	4437.7	3709.8	2105.5	182.3	42.8	9.6	11.4	11.5	54.5	301.2	2020.6
74°	4360.5	3671.2	2055.2	168.8	40.7	9.9	11.8	11.7	52.1	276.2	1968.3
75°	4301.8	3612.0	1994.5	155.5	38.5	10.3	12.2	11.9	50.3	252.4	1903.8
76°	4242.2	3557.0	1917.9	144.0	36.9	10.6	12.6	12.1	48.6	230.6	1856.5
77°	4145.5	3508.9	1870.1	132.9	35.9	11.0	13.0	12.3	47.2	211.0	1800.0
78°	4095.4	3459.1	1819.1	123.1	35.0	11.3	13.4	12.5	45.8	192.3	1737.1
79°	4018.1	3406.8	1760.9	113.6	34.5	11.7	13.8	12.8	44.2	175.6	1686.9
80°	3948.6	3349.8	1710.5	104.8	34.0	12.0	14.2	13.0	43.4	159.6	1633.8
81°	3856.9	3299.6	1646.8	96.6	33.6	12.3	14.6	13.3	42.5	145.2	1580.7
82°	3791.0	3238.9	1584.0	89.1	33.2	12.7	15.0	13.6	41.4	131.5	1518.9
83°	3708.9	3169.0	1527.8	82.4	32.8	13.0	15.4	13.9	40.9	119.5	1463.8
84°	3605.4	3099.9	1457.8	76.0	32.4	13.4	15.8	14.3	40.4	109.1	1413.1
85°	3530.3	3023.9	1402.6	69.9	32.2	13.7	16.3	14.6	40.1	99.5	1360.7
86°	3453.4	2956.2	1341.5	64.1	31.9	14.1	16.6	15.0	39.2	90.2	1306.7
87°	3374.1	2889.0	1284.5	59.3	31.5	14.4	17.0	15.3	38.5	81.9	1247.2
88°	3303.4	2818.7	1228.3	54.8	31.2	14.7	17.4	15.6	39.8	74.5	1191.7
89°	3224.6	2738.3	1167.1	51.4	31.0	15.0	17.8	15.9	39.8	68.0	1138.0



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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
90°	3152.7	2662.1	1112.0	48.8	30.6	15.4	18.1	16.2	39.6	62.5	1079.0
91°	3073.5	2590.4	1056.2	46.6	30.3	15.7	18.5	16.5	39.3	58.4	1025.6
92°	2971.0	2516.1	994.9	45.0	30.1	16.0	18.9	16.8	37.7	55.8	970.7
93°	2883.6	2443.3	942.9	43.9	29.7	16.3	19.2	17.0	37.2	53.9	922.0
94°	2808.2	2365.0	887.0	43.5	29.5	16.6	19.5	17.0	37.1	52.5	871.6
95°	2724.5	2289.5	838.1	43.4	29.3	16.8	19.8	17.1	36.6	51.6	826.2
96°	2632.4	2206.5	789.3	43.6	28.9	17.1	20.0	17.3	36.3	51.2	777.5
97°	2544.5	2125.8	741.7	44.3	28.7	17.3	20.3	17.4	35.9	51.1	727.6
98°	2460.1	2043.0	703.3	45.1	28.2	17.6	20.5	17.5	35.5	51.1	684.6
99°	2389.2	1959.6	661.4	45.7	27.9	17.8	20.8	17.6	35.1	51.3	645.1
100°	2301.7	1881.1	622.2	46.2	27.7	18.1	21.0	17.7	34.6	51.7	608.3
101°	2202.2	1795.4	587.6	46.8	27.3	18.3	21.2	17.9	34.4	52.2	572.4
102°	2109.1	1701.9	549.7	47.4	26.8	18.5	21.3	18.1	33.9	53.0	538.5
103°	2026.2	1620.7	516.5	48.0	26.4	18.7	21.5	18.3	33.5	53.6	505.5
104°	1931.5	1537.6	485.5	48.4	26.0	18.9	21.6	18.5	33.1	54.3	475.3
105°	1833.4	1452.9	451.9	48.8	25.7	19.0	21.8	18.7	32.6	54.9	444.2
106°	1731.3	1378.3	424.0	49.1	25.5	19.2	21.9	18.9	32.5	55.5	410.1
107°	1638.4	1300.6	395.7	49.2	25.2	19.4	21.9	19.1	32.2	56.0	373.0
108°	1534.1	1230.3	367.5	49.2	24.9	19.6	21.9	19.2	31.8	56.4	337.8
109°	1423.8	1151.8	340.4	49.2	24.7	19.7	22.0	19.4	31.4	56.8	301.9
110°	1325.8	1075.8	312.3	49.1	24.5	19.9	22.1	19.6	30.9	57.0	267.9
111°	1231.4	1001.2	286.2	49.0	24.2	20.0	22.1	19.7	30.4	57.0	240.1
112°	1139.6	921.3	264.0	48.8	23.9	20.2	22.2	19.9	30.0	56.9	216.2
113°	1060.3	831.9	242.7	48.6	23.7	20.3	22.2	20.1	29.6	56.6	195.3
114°	983.4	742.7	223.5	48.3	23.5	20.5	22.3	20.3	29.1	56.3	176.0
115°	912.9	642.3	205.2	48.1	23.4	20.6	22.4	20.5	28.6	56.0	160.2
116°	832.9	552.9	188.3	47.8	23.2	20.8	22.4	20.7	28.3	55.7	144.1
117°	750.5	478.5	172.6	47.4	23.1	20.9	22.4	20.8	27.9	55.3	130.8
118°	654.1	412.5	158.8	47.0	23.0	21.1	22.5	21.0	27.6	54.8	119.9
119°	570.3	367.2	146.3	46.6	22.8	21.3	22.5	21.1	27.3	54.2	110.1
120°	499.7	334.6	135.4	45.9	22.7	21.4	22.6	21.3	27.0	53.3	101.1
121°	446.1	303.7	125.9	45.0	22.7	21.6	22.6	21.4	26.7	52.0	92.6
122°	407.7	276.8	119.1	44.0	22.6	21.7	22.7	21.6	26.4	50.5	85.6
123°	373.1	254.9	111.8	43.0	22.6	21.9	22.8	21.7	26.1	48.8	77.5
124°	339.7	230.5	103.0	41.8	22.5	22.0	22.8	21.9	25.9	47.0	69.0
125°	309.8	211.4	93.4	40.5	22.5	22.2	22.9	22.0	25.7	45.1	60.5
126°	280.6	188.2	86.0	39.2	22.4	22.3	23.0	22.2	25.5	43.4	53.9
127°	254.8	167.7	79.3	37.8	22.3	22.5	23.1	22.3	25.2	41.6	49.1
128°	230.7	148.4	73.1	36.3	22.2	22.6	23.1	22.5	24.9	40.0	44.5
129°	205.2	129.6	67.0	34.8	22.2	22.7	23.2	22.6	24.6	38.2	40.3
130°	182.2	114.2	61.4	33.2	22.1	22.8	23.3	22.7	24.2	36.5	36.0
131°	160.1	99.8	55.1	31.7	22.0	23.0	23.4	22.9	23.9	34.7	32.0
132°	135.1	86.8	49.0	30.3	21.9	23.1	23.5	23.0	23.6	32.8	28.5
133°	112.3	76.6	43.6	29.0	21.8	23.2	23.6	23.1	23.1	30.9	25.7
134°	95.4	67.1	38.7	27.7	21.7	23.3	23.7	23.2	22.6	28.8	23.2



REPORT NUMBER: P670585
 CATALOG NUMBER: WXP120LSFSUNVDBZ-90W-4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
135°	80.0	57.9	34.9	26.5	21.5	23.4	23.8	23.3	22.1	26.7	21.4
136°	67.8	49.5	31.6	25.5	21.4	23.5	23.9	23.4	21.5	24.6	18.4
137°	57.4	42.7	28.2	24.5	21.2	23.6	24.0	23.5	20.7	22.4	15.4
138°	48.3	36.7	25.2	23.6	21.1	23.6	24.1	23.5	19.9	20.4	13.3
139°	40.1	30.6	23.8	22.8	20.9	23.6	24.2	23.6	19.2	18.6	12.6
140°	32.1	24.2	22.5	22.0	20.7	23.7	24.3	23.7	19.0	17.1	12.1
141°	25.2	19.9	21.6	21.2	20.5	23.7	24.3	23.5	18.8	15.7	11.9
142°	20.3	18.6	20.9	20.4	20.3	23.7	24.4	23.5	18.6	14.4	11.9
143°	15.6	16.9	20.4	19.6	20.1	23.6	24.4	23.5	18.5	13.5	12.3
144°	8.4	16.4	20.0	18.8	19.8	23.6	24.4	23.4	18.4	13.0	12.9
145°	6.2	16.6	19.3	18.0	19.4	23.5	24.4	23.3	18.4	12.8	13.7
146°	5.9	16.1	19.4	17.1	19.3	23.4	24.3	23.2	18.3	12.9	14.5
147°	5.8	14.6	19.5	16.2	19.3	23.3	24.2	23.0	18.1	13.0	15.1
148°	5.8	13.7	19.8	15.5	19.3	23.2	24.2	22.9	17.9	13.1	15.7
149°	5.9	13.0	20.2	14.9	19.3	23.1	24.0	22.7	17.7	13.3	16.2
150°	5.9	12.5	20.8	14.6	19.2	23.0	23.9	22.5	17.6	13.4	16.7
151°	5.6	12.0	21.6	14.6	19.2	22.8	23.7	22.3	17.5	13.6	15.8
152°	5.4	10.7	20.9	14.6	19.2	22.6	23.6	22.0	17.4	13.7	14.8
153°	5.3	9.9	19.6	14.7	19.2	22.4	23.3	21.9	17.4	13.9	13.9
154°	5.7	10.5	18.4	14.9	19.2	22.3	23.1	21.8	17.2	14.0	13.2
155°	5.8	11.2	17.2	15.0	19.2	22.1	22.9	21.5	17.2	14.2	12.5
156°	6.1	11.8	15.6	15.2	19.1	21.9	22.6	21.2	17.1	14.3	12.5
157°	6.6	12.3	15.0	15.3	19.1	21.7	22.3	20.9	17.0	14.5	12.6
158°	7.2	12.8	14.8	15.4	19.1	21.4	22.0	20.6	17.0	14.6	12.7
159°	7.9	12.9	14.6	15.5	19.0	21.2	21.7	20.4	16.9	14.7	12.8
160°	8.5	13.1	14.4	15.6	19.0	21.0	21.4	20.1	16.8	14.9	12.9
161°	8.9	13.1	14.2	15.8	18.9	20.8	21.1	19.8	16.6	15.0	13.1
162°	9.2	13.4	14.1	15.8	18.8	20.5	20.8	19.6	16.5	15.1	13.2
163°	9.7	13.3	14.0	15.9	18.7	20.3	20.4	19.4	16.5	15.2	13.4
164°	9.8	12.5	13.9	16.0	18.7	20.1	20.1	19.1	16.4	15.3	13.5
165°	10.1	11.8	13.9	16.1	18.6	19.8	19.8	18.7	16.3	15.4	13.6
166°	10.0	10.8	13.8	16.2	18.4	19.6	19.5	18.4	16.2	15.5	13.8
167°	10.1	11.0	13.2	16.3	18.3	19.4	19.1	18.1	16.1	15.6	13.9
168°	10.2	11.2	12.9	16.3	18.2	19.1	18.8	17.8	15.9	15.7	14.0
169°	10.7	11.4	13.0	16.4	18.1	18.8	18.5	17.5	15.8	15.8	14.1
170°	11.1	11.6	13.1	16.5	17.9	18.6	18.1	17.2	15.7	15.9	14.3
171°	11.6	11.9	13.1	16.5	17.8	18.3	17.7	16.9	15.5	16.0	14.4
172°	12.0	12.2	13.3	16.6	17.6	18.0	17.4	16.7	15.3	16.1	14.6
173°	12.5	12.5	13.3	16.6	17.4	17.7	17.0	16.4	15.1	16.1	14.7
174°	12.9	12.8	13.5	16.6	17.3	17.4	16.6	16.0	14.9	16.2	14.9
175°	13.3	13.1	13.5	16.6	17.1	17.0	16.2	15.7	14.6	16.3	15.1
176°	13.7	13.4	13.4	16.6	16.9	16.7	15.8	15.4	13.8	16.3	15.3
177°	14.1	13.6	13.3	16.6	16.7	16.4	15.5	15.0	13.6	16.4	15.6
178°	14.2	13.6	13.3	16.6	16.4	16.1	15.1	14.4	13.5	16.5	15.8
179°	14.3	13.6	13.2	16.6	16.2	15.7	14.7	13.9	13.3	16.5	15.9



REPORT NUMBER: P670585
CATALOG NUMBER: WXPM120LSFSUNVDBZ-90W-4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
180°	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4



REPORT NUMBER: P670585
CATALOG NUMBER: WXP120LSFSUNVDBZ-90W-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
0°	2296.8	2296.8
1°	2450.2	2505.7
2°	2613.6	2715.3
3°	2813.1	2945.4
4°	3013.0	3150.2
5°	3242.2	3367.1
6°	3410.4	3559.3
7°	3552.0	3727.5
8°	3678.5	3881.1
9°	3767.5	4084.8
10°	3916.6	4236.4
11°	4042.5	4366.9
12°	4121.8	4549.6
13°	4309.4	4653.9
14°	4444.0	4728.6
15°	4622.9	4774.8
16°	4674.0	4828.0
17°	4709.3	4823.3
18°	4710.2	4891.2
19°	4612.1	4957.0
20°	4573.5	4933.2
21°	4583.3	4979.9
22°	4634.3	4913.8
23°	4701.1	4912.5
24°	4716.9	4823.6
25°	4704.0	4809.8
26°	4634.0	4747.6
27°	4536.1	4715.3
28°	4443.9	4710.5
29°	4348.8	4642.3
30°	4333.9	4645.8
31°	4344.9	4585.9
32°	4306.1	4585.3
33°	4241.1	4509.9
34°	4178.3	4535.9
35°	4095.9	4473.5
36°	4033.1	4442.1
37°	3955.8	4434.5
38°	3929.3	4435.4
39°	3891.0	4391.5
40°	3892.1	4393.0
41°	3866.6	4360.7
42°	3852.8	4320.8
43°	3771.1	4360.0
44°	3743.9	4322.4



REPORT NUMBER: P670585
CATALOG NUMBER: WXPM120LSFSUNVDBZ-90W-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
45°	3706.9	4334.2
46°	3665.1	4372.2
47°	3652.5	4346.3
48°	3647.5	4417.2
49°	3625.0	4413.5
50°	3640.2	4498.2
51°	3647.5	4582.2
52°	3646.0	4707.1
53°	3674.2	4768.3
54°	3695.7	4834.4
55°	3734.3	4859.1
56°	3765.7	4889.5
57°	3798.3	4929.7
58°	3820.9	4941.3
59°	3819.5	4934.7
60°	3815.1	4930.7
61°	3814.5	4930.6
62°	3808.2	4911.4
63°	3800.9	4880.5
64°	3792.4	4870.3
65°	3771.7	4854.3
66°	3755.6	4792.9
67°	3742.0	4727.0
68°	3736.5	4700.2
69°	3712.7	4662.8
70°	3687.8	4584.8
71°	3644.8	4527.3
72°	3618.1	4487.5
73°	3574.3	4437.7
74°	3531.5	4360.5
75°	3489.1	4301.8
76°	3443.4	4242.2
77°	3385.6	4145.5
78°	3334.5	4095.4
79°	3283.1	4018.1
80°	3213.7	3948.6
81°	3152.8	3856.9
82°	3091.2	3791.0
83°	3014.5	3708.9
84°	2941.5	3605.4
85°	2866.2	3530.3
86°	2795.9	3453.4
87°	2720.9	3374.1
88°	2649.4	3303.4
89°	2576.6	3224.6



REPORT NUMBER: P670585
CATALOG NUMBER: WXPM120LSFSUNVDBZ-90W-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
90°	2496.3	3152.7
91°	2427.0	3073.5
92°	2356.4	2971.0
93°	2275.3	2883.6
94°	2198.9	2808.2
95°	2124.7	2724.5
96°	2046.6	2632.4
97°	1971.4	2544.5
98°	1892.5	2460.1
99°	1816.4	2389.2
100°	1736.1	2301.7
101°	1657.3	2202.2
102°	1571.3	2109.1
103°	1488.4	2026.2
104°	1408.8	1931.5
105°	1327.4	1833.4
106°	1240.6	1731.3
107°	1155.7	1638.4
108°	1075.3	1534.1
109°	993.6	1423.8
110°	922.0	1325.8
111°	852.6	1231.4
112°	785.1	1139.6
113°	716.9	1060.3
114°	651.0	983.4
115°	572.3	912.9
116°	493.4	832.9
117°	429.3	750.5
118°	378.0	654.1
119°	338.4	570.3
120°	307.3	499.7
121°	278.5	446.1
122°	252.4	407.7
123°	229.4	373.1
124°	207.0	339.7
125°	186.3	309.8
126°	164.9	280.6
127°	145.8	254.8
128°	126.5	230.7
129°	107.6	205.2
130°	91.6	182.2
131°	77.3	160.1
132°	65.0	135.1
133°	55.2	112.3
134°	46.4	95.4



REPORT NUMBER: P670585
CATALOG NUMBER: WXPM120LSFSUNVDBZ-90W-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
135°	39.0	80.0
136°	32.2	67.8
137°	26.8	57.4
138°	22.1	48.3
139°	16.9	40.1
140°	11.1	32.1
141°	8.9	25.2
142°	8.7	20.3
143°	8.9	15.6
144°	9.5	8.4
145°	9.9	6.2
146°	9.6	5.9
147°	9.0	5.8
148°	8.6	5.8
149°	8.2	5.9
150°	8.1	5.9
151°	7.6	5.6
152°	7.4	5.4
153°	8.1	5.3
154°	8.5	5.7
155°	8.8	5.8
156°	9.2	6.1
157°	9.6	6.6
158°	9.8	7.2
159°	10.0	7.9
160°	10.1	8.5
161°	10.3	8.9
162°	10.3	9.2
163°	10.2	9.7
164°	10.3	9.8
165°	10.4	10.1
166°	10.7	10.0
167°	11.1	10.1
168°	11.5	10.2
169°	11.9	10.7
170°	12.3	11.1
171°	12.7	11.6
172°	13.1	12.0
173°	13.5	12.5
174°	13.9	12.9
175°	14.3	13.3
176°	14.6	13.7
177°	14.9	14.1
178°	15.1	14.2
179°	15.3	14.3



REPORT NUMBER: P670585
CATALOG NUMBER: WXPM120LSFSUNVDBZ-90W-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
180°	14.4	14.4

(END OF REPORT)