

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: P670611

Luminaire Tested: MWP20FSUNVDBZ-15W-4000K

Issue Date: 4/5/2023

Test Information

Test Method: LM-79-2019
Report Number: P670611
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (2022-07-24)
Test Lab: INNOVATION CENTER
Issue Date: 4/5/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: MWP20FSUNVDBZ-15W-4000K
Description: MINI WALL PACK
Light Source: 4000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2186 lumens
Efficiency: N/A
Efficacy: 143.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.51' x L: 0.44' x H: 0.31')
IES Classification: Type IV - Short
BUG Rating: B1 - U3 - G2

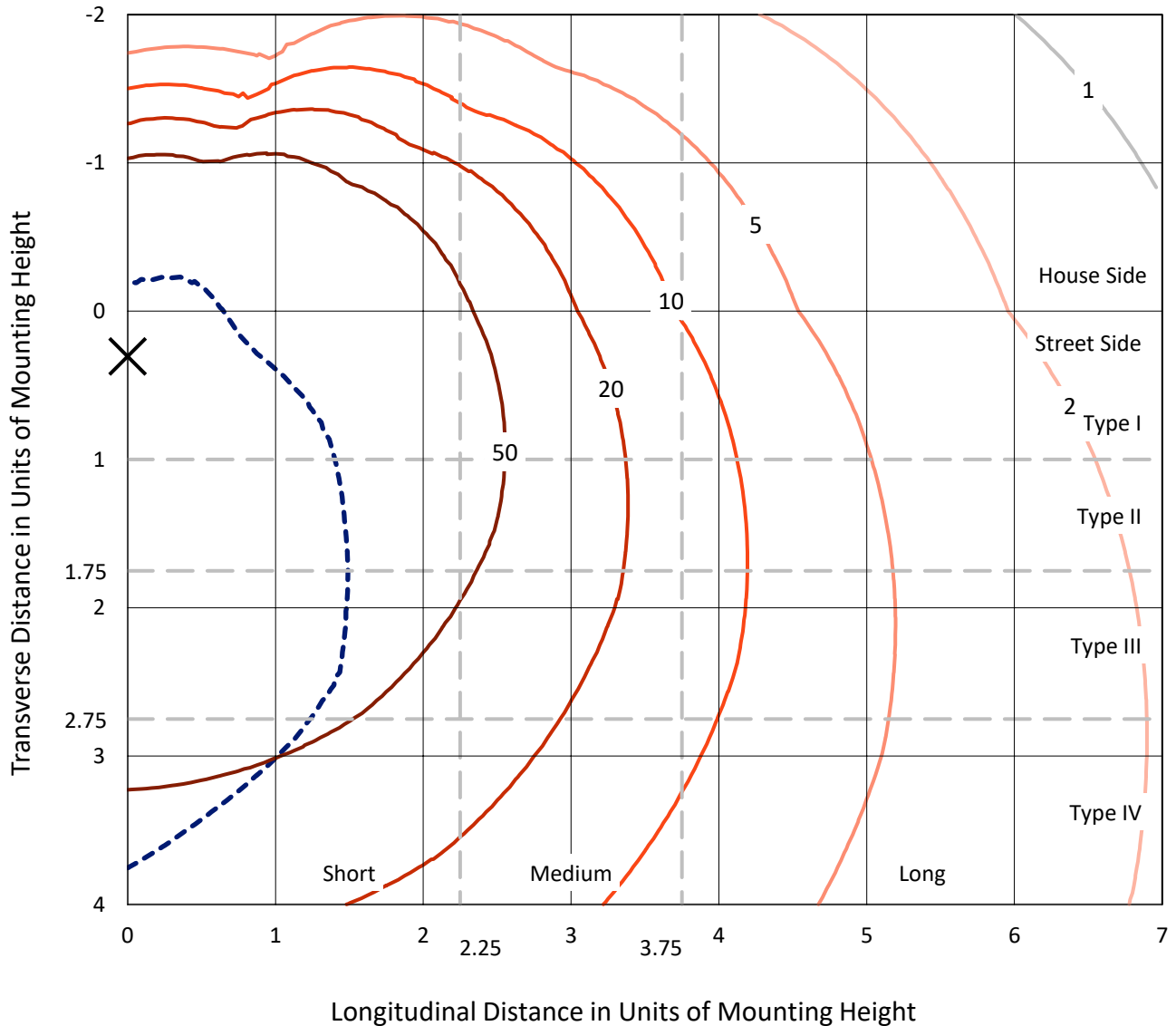
Input Watts (W): 15.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P670611
 CATALOG NUMBER: MWP20FSUNVDBZ-15W-4000K

Iso-Footcandle Lines of Horizontal Illumination

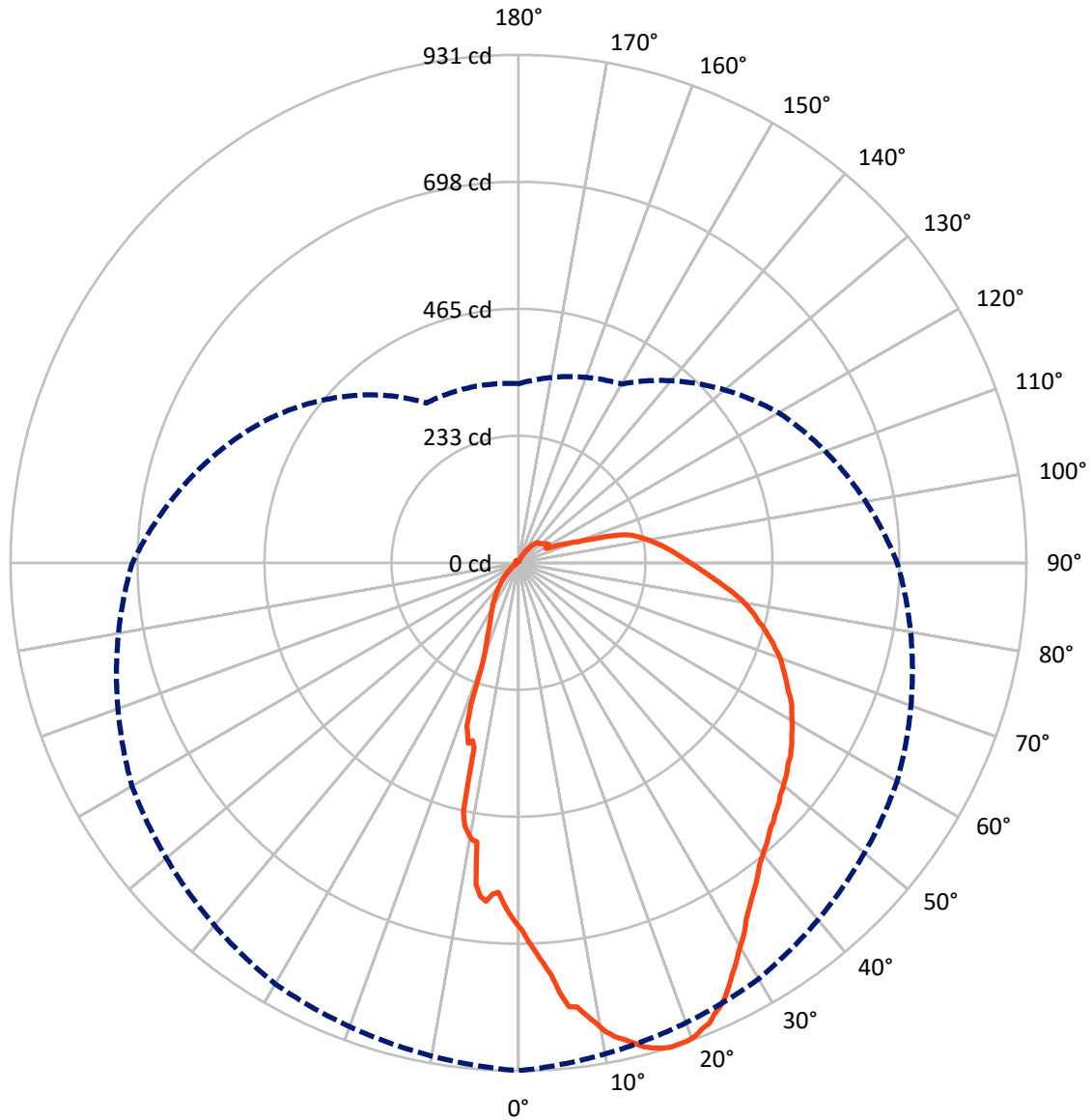
× Max cd
 - - - 1/2 Max cd



Based on 0.5 foot mounting height. Maximum calculated value = 3346.7 fc
 Type IV - Short - N/A

REPORT NUMBER: P670611
CATALOG NUMBER: MWP20FSUNVDBZ-15W-4000K

Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 17-Deg Vertical

REPORT NUMBER: P670611
 CATALOG NUMBER: MWP20FSUNVDBZ-15W-4000K

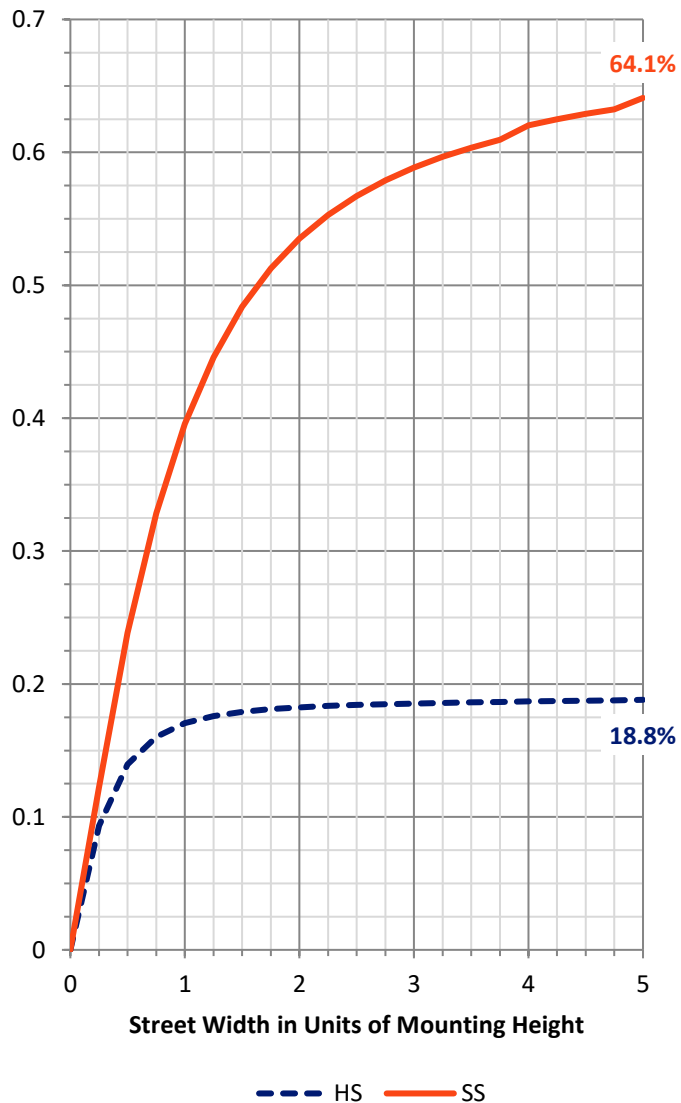
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	420.0	38.6	458.7
	% Fixture	19.2	1.8	21.0
Street Side	Lumens	1493.0	234.4	1727.3
	% Fixture	68.3	10.7	79.0
Total	Lumens	1913.0	273.0	2186.0
	% Fixture	87.5	12.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.7	3.1
10°-20°	189.5	8.7
20°-30°	251.0	11.5
30°-40°	260.9	11.9
40°-50°	267.7	12.2
50°-60°	267.3	12.2
60°-70°	245.6	11.2
70°-80°	205.7	9.4
80°-90°	158.7	7.3
90°-100°	118.3	5.4
100°-110°	73.7	3.4
110°-120°	34.3	1.6
120°-130°	21.7	1.0
130°-140°	13.7	0.6
140°-150°	7.2	0.3
150°-160°	2.7	0.1
160°-170°	1.0	0.0
170°-180°	0.4	0.0
0°-90°	1913.0	87.5
0°-180°	2186.0	100.0

Coefficient of Utilization



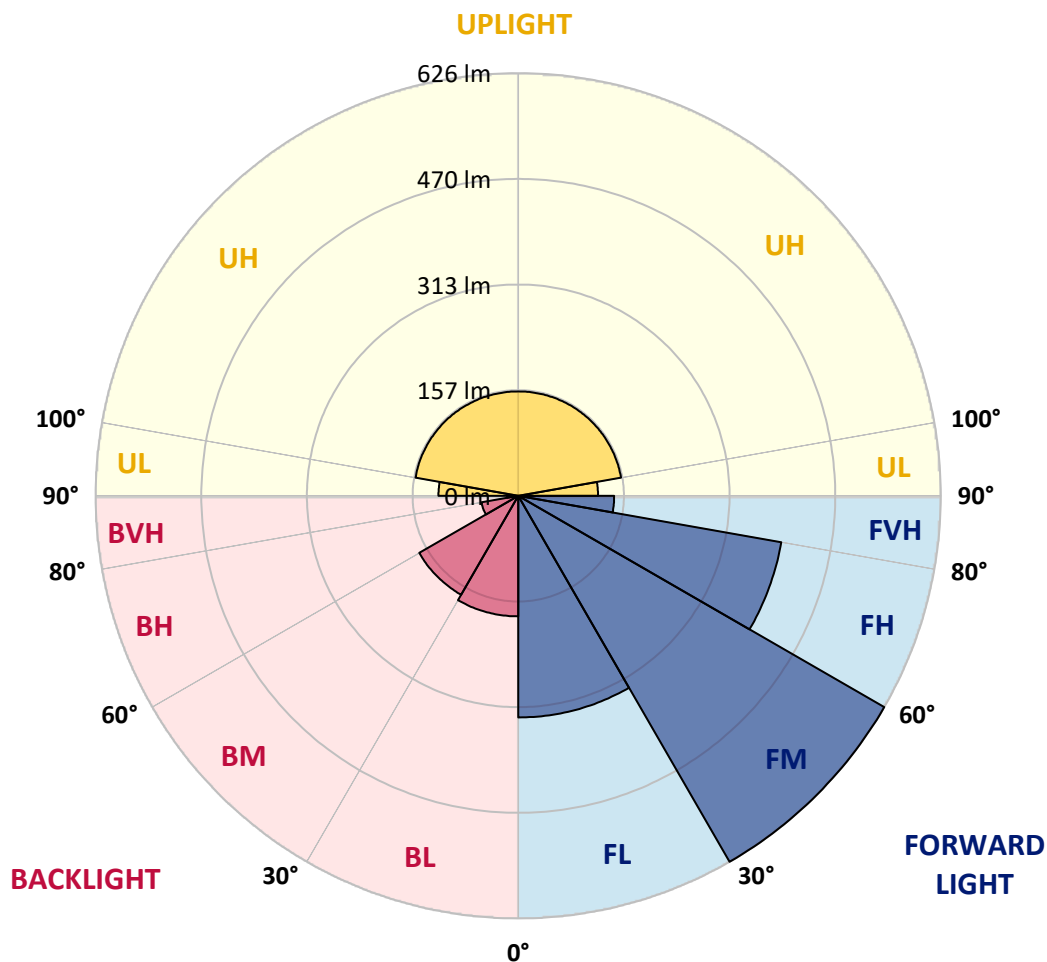
REPORT NUMBER: P670611
 CATALOG NUMBER: MWP20FSUNVDBZ-15W-4000K

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	328.5	15.0			
FM (30°-60°)	626.4	28.7			
FH (60°-80°)	395.9	18.1			G0/660
FVH (80°-90°)	142.1	6.5			G2/225
BL (0°-30°)	178.7	8.2	B1/500		
BM (30°-60°)	169.4	7.8	B0/220		
BH (60°-80°)	55.3	2.5	B0/110		G0/110
BVH (80°-90°)	16.5	0.8			G1/100
UL (90°-100°)	118.3	5.4		U3/500	
UH (100°-180°)	154.7	7.1		U3/500	

BUG Rating: B1-U3-G2

Type IV Short





REPORT NUMBER: P670611

CATALOG NUMBER: MWP20FSUNVDBZ-15W-4000K

CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	672.1	672.1	672.1	672.1	672.1	672.1	672.1	672.1	672.1	672.1	672.1
1°	693.8	682.4	666.2	680.9	670.7	662.6	658.2	651.1	646.8	684.5	690.7
2°	712.4	702.2	679.6	683.0	660.9	648.4	642.2	636.4	636.4	687.0	704.5
3°	734.3	720.7	695.3	688.7	655.3	633.2	624.2	621.6	627.3	693.0	718.7
4°	756.1	741.5	711.4	691.0	649.0	617.5	604.7	602.6	616.0	700.8	733.8
5°	791.3	762.3	726.1	695.3	641.9	601.0	609.2	585.7	607.6	706.4	749.8
6°	818.6	802.3	742.0	701.6	633.7	617.0	623.0	599.4	599.0	713.8	766.6
7°	820.6	818.4	755.0	705.2	626.3	629.3	614.9	606.5	590.9	720.5	778.9
8°	837.8	820.4	769.5	710.5	618.1	620.7	594.6	601.4	582.3	721.7	791.6
9°	854.4	831.5	783.2	713.8	616.3	610.8	516.8	578.8	576.9	727.2	805.6
10°	872.8	845.4	804.8	713.6	634.0	550.2	514.5	543.8	593.3	729.8	818.6
11°	885.7	858.6	812.2	715.1	635.6	527.6	504.1	490.5	608.4	731.2	835.6
12°	894.4	865.5	814.1	715.4	626.6	535.0	492.3	502.3	597.7	730.5	838.9
13°	905.1	871.8	810.8	714.7	615.1	514.6	466.2	482.0	589.7	731.1	835.2
14°	916.1	876.4	809.0	712.1	595.8	489.6	347.7	454.2	562.7	727.7	828.5
15°	922.3	881.1	809.0	710.2	585.9	464.4	336.7	413.9	550.9	721.9	823.7
16°	927.5	882.5	806.6	701.7	566.0	379.0	343.2	352.4	532.3	714.8	823.5
17°	930.6	880.0	800.8	693.7	550.1	378.2	328.1	337.9	527.9	707.5	817.7
18°	929.5	882.1	795.7	685.4	542.0	368.5	314.4	340.1	522.9	697.4	808.9
19°	929.1	876.7	785.6	674.0	536.0	347.9	275.0	322.4	517.2	685.0	799.2
20°	925.6	872.6	774.7	663.5	524.1	328.3	200.8	298.6	511.2	670.8	788.8
21°	917.8	863.3	763.1	650.5	512.8	303.1	175.3	267.8	505.2	660.0	776.2
22°	913.3	855.4	748.1	633.5	502.0	268.3	161.5	236.1	494.7	644.1	761.5
23°	900.9	842.8	736.6	620.1	486.9	237.7	149.5	218.5	483.7	624.8	747.1
24°	892.6	833.9	720.8	603.1	471.0	221.1	138.8	204.7	471.4	610.7	733.6
25°	880.6	821.2	705.1	586.9	457.1	206.6	129.5	192.8	457.0	593.4	717.0
26°	865.2	808.9	691.7	570.0	440.3	192.4	121.7	180.6	438.9	574.3	702.4
27°	848.7	794.4	676.3	553.8	422.1	177.7	115.1	167.8	420.3	555.3	686.4
28°	834.8	780.7	660.9	536.8	403.1	164.6	109.2	155.1	402.1	538.9	670.9
29°	819.1	765.4	647.4	520.4	386.7	151.5	103.7	142.7	384.2	521.7	657.7
30°	806.3	750.8	633.2	504.4	369.9	140.3	98.3	133.1	366.1	504.5	641.6
31°	792.6	736.4	620.4	488.9	351.8	130.2	93.6	125.0	348.3	488.3	629.1
32°	775.9	724.0	607.4	473.3	335.3	121.6	88.8	118.0	330.5	473.2	616.6
33°	764.1	708.0	595.8	457.4	318.9	114.3	84.4	111.9	312.5	458.2	604.3
34°	751.6	695.8	585.1	444.8	304.6	107.8	79.6	106.1	295.4	444.0	591.7
35°	741.3	685.3	573.2	429.4	289.9	101.9	75.1	100.8	278.9	430.8	579.2
36°	731.1	675.6	563.3	417.9	275.9	96.6	70.7	95.4	264.9	418.6	572.2
37°	720.4	664.3	556.5	407.6	262.7	91.6	66.6	90.3	251.2	407.2	563.2
38°	709.0	655.4	547.9	397.6	250.4	86.7	62.6	85.3	239.0	398.6	553.9
39°	701.0	647.5	541.3	389.1	239.6	82.1	58.7	80.3	228.7	391.5	548.7
40°	692.9	641.0	536.0	382.4	229.2	77.5	55.1	75.4	219.8	384.2	543.1
41°	686.3	633.2	529.9	376.8	220.3	73.1	51.3	70.8	211.3	377.9	536.2
42°	678.7	627.9	525.6	369.9	212.4	68.6	48.0	66.2	204.0	372.0	531.8
43°	670.4	621.3	522.0	365.3	205.1	64.7	44.7	62.1	196.9	367.2	527.4
44°	666.0	615.9	517.8	359.4	198.7	60.5	42.1	58.0	190.1	362.8	525.4



REPORT NUMBER: P670611

CATALOG NUMBER: MWP20FSUNVDBZ-15W-4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
45°	658.6	610.6	516.3	355.0	191.6	57.0	39.1	54.5	183.2	356.2	519.6
46°	653.5	606.3	511.2	349.3	184.9	53.2	36.4	51.0	177.0	349.7	516.1
47°	648.3	601.7	509.3	342.8	178.3	49.5	33.5	47.7	170.3	345.2	510.2
48°	640.3	597.0	505.2	337.9	171.4	46.2	30.5	44.6	164.2	338.7	506.3
49°	636.7	592.1	502.1	333.0	165.7	41.8	27.2	41.2	157.9	333.1	501.9
50°	631.4	588.7	498.9	327.5	158.6	39.0	24.6	38.3	152.4	327.1	496.8
51°	626.9	584.1	491.8	320.6	152.5	35.0	22.0	35.2	146.6	320.0	494.1
52°	620.9	579.7	488.2	315.0	146.4	32.0	20.1	32.5	140.2	313.4	489.3
53°	615.1	575.1	483.8	308.7	140.0	29.0	18.3	30.0	134.1	307.0	483.2
54°	612.0	570.4	477.5	302.0	134.2	26.6	17.2	27.8	128.5	299.1	478.8
55°	605.7	565.5	471.2	295.1	127.9	24.0	16.0	25.6	122.8	292.7	471.6
56°	600.3	560.8	465.8	286.9	122.1	21.9	15.1	23.8	117.0	285.4	467.0
57°	593.5	555.0	459.8	280.0	116.1	20.1	13.8	22.0	111.3	277.2	458.8
58°	588.0	548.7	454.8	273.3	110.5	18.3	12.5	20.3	105.9	269.2	451.4
59°	582.1	545.8	448.2	266.4	104.7	17.0	11.3	18.9	100.6	261.5	443.7
60°	575.4	538.8	442.0	259.2	99.0	15.7	10.2	17.5	95.8	253.7	436.9
61°	569.6	532.8	435.1	251.5	93.7	14.7	9.2	16.2	90.7	244.7	430.2
62°	564.2	526.5	428.6	244.5	88.8	14.0	8.2	15.2	86.4	237.0	424.1
63°	557.2	520.1	421.0	236.5	84.3	13.1	7.4	14.2	81.9	229.1	418.0
64°	547.9	514.3	412.4	228.7	79.5	12.4	6.6	13.3	77.5	220.4	410.1
65°	541.1	506.9	405.3	220.3	75.0	11.8	6.0	12.5	73.3	211.9	403.1
66°	534.4	500.0	397.4	210.3	71.0	11.2	5.4	11.7	69.6	203.9	396.3
67°	527.0	492.6	389.7	203.5	67.5	10.6	5.0	11.0	66.1	195.4	387.6
68°	520.1	483.6	380.9	194.7	64.1	9.9	4.8	10.4	62.7	187.4	379.1
69°	513.9	476.0	371.7	186.6	61.0	9.3	4.6	9.8	59.8	178.7	371.3
70°	505.9	467.0	362.0	178.1	58.3	8.9	4.4	9.4	57.2	171.5	363.1
71°	496.6	457.7	352.2	170.2	55.8	8.6	4.3	9.2	55.1	163.7	352.8
72°	488.7	450.7	342.4	162.4	53.6	8.4	4.1	9.0	52.9	156.0	342.5
73°	479.3	441.4	333.1	154.5	51.6	8.2	4.0	8.8	50.9	148.4	332.3
74°	470.0	432.1	324.4	147.2	49.5	8.1	3.8	8.7	48.9	141.9	322.4
75°	461.5	424.2	314.9	140.5	47.7	7.9	3.7	8.5	47.2	135.6	313.0
76°	450.9	415.2	305.6	134.3	46.1	7.8	3.7	8.4	45.6	129.2	303.4
77°	443.5	407.3	297.3	128.3	44.6	7.7	3.6	8.3	44.1	123.7	294.8
78°	434.4	397.3	289.0	123.0	43.1	7.6	3.5	8.2	42.7	118.3	287.4
79°	424.5	389.6	280.1	117.2	41.8	7.5	3.5	8.1	41.6	113.4	278.0
80°	414.6	379.5	272.0	112.4	40.7	7.4	3.5	8.1	40.4	108.2	269.4
81°	403.1	369.4	263.0	107.5	39.6	7.4	3.5	8.0	39.5	104.0	260.1
82°	392.1	358.1	254.3	102.9	38.6	7.4	3.4	8.0	38.5	99.6	250.9
83°	379.9	347.7	245.5	98.9	37.7	7.4	3.5	8.0	37.7	95.6	241.9
84°	368.8	338.2	236.3	94.9	36.7	7.4	3.5	8.1	36.9	92.1	233.3
85°	357.4	327.2	227.8	91.2	35.9	7.4	3.6	8.1	36.1	88.7	226.2
86°	347.3	317.1	220.4	87.6	34.9	7.4	3.6	8.1	35.3	85.3	217.9
87°	337.4	307.9	213.3	84.1	34.1	7.4	3.7	8.2	34.6	82.2	211.3
88°	328.0	299.1	205.8	80.9	33.5	7.4	3.7	8.2	33.9	79.0	203.7
89°	319.8	291.6	200.0	77.8	32.7	7.5	3.8	8.3	33.2	75.9	197.3



REPORT NUMBER: P670611

CATALOG NUMBER: MWP20FSUNVDBZ-15W-4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
90°	310.6	283.8	193.2	74.8	31.8	7.6	3.9	8.3	32.4	72.9	191.6
91°	302.8	275.4	187.4	72.0	31.1	7.6	4.0	8.4	31.9	70.5	186.0
92°	295.2	268.3	182.1	69.4	30.5	7.7	4.1	8.5	31.4	68.1	180.5
93°	288.2	261.4	176.1	67.0	29.8	7.8	4.3	8.6	30.5	65.8	174.3
94°	281.3	253.9	171.0	64.6	29.0	7.6	4.2	8.4	29.7	63.5	169.6
95°	273.5	247.5	165.3	62.3	28.4	7.3	4.1	8.2	29.2	61.2	164.4
96°	266.7	240.5	159.9	60.1	27.8	7.3	4.1	8.3	28.5	58.8	158.7
97°	259.6	234.0	154.4	58.0	27.2	7.2	4.2	8.3	28.0	56.7	153.0
98°	252.2	227.3	149.0	55.7	26.6	7.2	4.3	8.3	27.5	54.5	147.9
99°	244.9	221.4	143.8	53.6	26.1	7.2	4.4	8.3	27.0	52.4	142.7
100°	237.8	213.8	138.4	51.5	25.5	7.2	4.4	8.3	26.5	50.3	137.5
101°	230.0	207.2	132.8	49.2	25.0	7.1	4.5	8.2	25.9	48.1	132.2
102°	222.5	198.2	126.9	47.1	24.4	7.0	4.5	8.1	25.2	46.0	127.0
103°	215.0	182.4	119.5	44.9	23.8	7.1	4.6	7.9	24.6	43.9	121.8
104°	204.8	164.0	110.8	42.5	23.1	7.1	4.7	7.9	24.0	41.8	116.3
105°	189.8	143.2	99.5	40.1	22.4	7.2	4.8	8.0	23.3	39.7	111.0
106°	170.3	127.6	88.4	37.9	21.5	7.2	5.0	8.0	22.6	37.5	105.2
107°	148.9	117.2	78.6	35.2	20.5	7.1	5.2	8.0	21.8	35.0	98.8
108°	132.9	111.4	69.2	32.9	19.6	7.0	5.6	7.9	21.0	32.8	92.0
109°	115.0	106.1	62.7	30.3	18.8	7.0	5.8	7.9	20.2	30.8	83.5
110°	107.6	98.5	58.0	28.0	17.9	6.9	6.0	7.8	19.5	29.1	76.3
111°	97.1	86.6	55.4	25.8	17.0	6.8	6.1	7.7	18.7	27.6	70.2
112°	89.7	76.9	53.6	24.1	16.2	6.8	6.2	7.7	18.0	26.2	65.5
113°	82.8	69.0	51.3	22.3	15.4	6.8	6.2	7.7	17.4	24.9	61.6
114°	74.7	66.6	49.7	20.8	14.7	6.6	6.3	7.6	16.7	23.6	57.6
115°	66.5	67.4	48.2	19.7	14.0	6.5	6.2	7.5	16.1	22.3	53.0
116°	60.8	70.7	46.0	18.5	13.2	6.4	6.2	7.4	15.5	21.1	49.1
117°	56.9	73.4	43.2	17.4	12.6	6.4	6.1	7.3	15.0	20.0	44.8
118°	57.2	72.9	39.9	16.6	12.1	6.3	6.0	7.3	14.5	19.2	40.9
119°	63.7	71.4	37.0	15.8	11.7	6.4	5.9	7.2	14.0	18.5	37.5
120°	64.7	69.4	34.0	15.0	11.3	6.4	5.8	7.1	13.6	17.8	34.5
121°	64.9	67.1	31.5	14.5	10.9	6.3	5.4	7.0	13.1	17.3	31.9
122°	64.2	64.7	29.2	14.1	10.4	6.3	5.3	6.9	12.7	16.9	29.6
123°	62.5	62.3	27.1	13.6	9.9	6.2	5.2	6.8	12.2	16.4	27.5
124°	61.0	59.9	25.1	13.4	9.4	6.0	5.3	6.7	11.9	15.9	25.6
125°	60.0	58.0	23.3	13.0	9.1	5.9	5.3	6.6	11.6	15.5	23.8
126°	58.9	56.1	22.3	12.6	8.8	5.8	5.2	6.5	11.4	15.1	21.9
127°	57.4	54.5	21.1	12.2	8.5	5.7	5.2	6.4	11.1	14.6	20.3
128°	56.0	53.1	19.7	11.9	8.2	5.6	5.0	6.3	10.8	14.2	18.7
129°	54.5	51.8	18.4	11.6	7.9	5.5	5.1	6.2	10.5	14.0	17.2
130°	53.4	50.6	17.2	11.4	7.6	5.5	4.8	6.0	10.2	13.6	15.9
131°	52.6	49.3	16.1	11.1	7.1	5.4	4.8	5.8	9.9	13.4	14.6
132°	52.2	48.0	15.2	10.9	6.9	5.5	4.7	5.8	9.7	13.3	13.4
133°	52.2	46.6	14.4	10.8	6.7	5.6	4.7	5.9	9.5	13.0	12.3
134°	51.9	44.9	13.6	10.6	6.6	5.6	4.7	6.0	9.3	12.8	11.4



REPORT NUMBER: P670611

CATALOG NUMBER: MWP20FSUNVDBZ-15W-4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
135°	51.4	43.1	12.9	10.2	6.8	5.5	4.8	5.9	9.1	12.6	10.8
136°	50.5	41.1	12.3	10.1	7.0	5.5	4.9	5.7	8.8	12.4	10.2
137°	49.3	38.7	11.6	10.1	7.0	5.4	4.9	5.8	8.4	12.2	9.6
138°	47.8	36.3	10.8	10.1	7.1	5.4	4.8	5.8	8.0	12.1	9.0
139°	46.0	34.0	10.0	10.3	7.0	5.3	4.6	5.8	7.6	11.9	8.6
140°	44.0	31.6	9.4	10.5	6.6	5.3	4.4	5.7	7.3	11.7	8.2
141°	41.4	29.5	8.8	10.6	6.5	5.2	4.4	5.7	7.0	11.5	7.8
142°	38.7	27.4	8.2	10.7	6.3	5.2	4.4	5.6	6.8	11.3	7.5
143°	36.1	25.3	7.7	10.7	6.2	5.3	4.4	5.7	6.5	11.1	7.4
144°	33.6	23.2	7.4	10.5	6.2	5.2	4.4	5.6	6.4	11.0	7.4
145°	31.1	20.9	7.3	10.6	6.1	5.1	4.5	5.5	6.1	11.1	7.6
146°	28.7	18.9	7.3	10.7	6.0	5.0	4.5	5.3	5.8	11.1	7.7
147°	26.3	17.1	7.5	10.8	5.9	4.8	4.7	5.1	5.4	11.3	8.0
148°	23.9	15.4	7.5	11.1	5.7	4.7	4.7	4.7	5.0	11.5	7.9
149°	21.5	13.9	7.1	11.1	5.4	4.6	4.7	4.5	4.7	11.4	7.6
150°	19.3	11.8	6.4	10.9	5.1	4.6	4.7	4.4	4.5	11.1	7.1
151°	17.1	10.2	5.8	10.6	4.9	4.5	4.6	4.5	4.3	10.6	6.5
152°	15.3	8.7	5.4	10.1	4.7	4.4	4.6	4.6	4.4	10.0	6.0
153°	13.7	7.3	5.2	9.5	4.6	4.5	4.6	4.6	4.2	9.3	5.7
154°	12.1	5.8	5.3	8.7	4.5	4.4	4.6	4.5	4.3	8.5	5.6
155°	10.8	3.8	4.9	7.8	4.4	4.3	4.6	4.3	4.3	7.5	5.1
156°	9.5	2.8	4.2	6.8	4.3	4.4	4.6	4.3	4.3	6.5	4.3
157°	7.8	2.4	3.4	6.0	4.2	4.3	4.5	4.2	4.2	5.7	3.6
158°	5.0	2.4	3.0	5.3	4.1	4.4	4.4	4.2	4.2	5.0	3.2
159°	3.2	2.4	2.9	4.6	4.0	4.4	4.5	4.1	4.1	4.3	3.1
160°	2.4	2.4	2.7	4.0	4.0	4.4	4.4	4.1	4.0	3.7	3.0
161°	2.4	2.5	2.6	3.7	4.0	4.3	4.3	4.1	4.0	3.6	3.0
162°	2.5	2.6	2.6	3.8	4.0	4.3	4.2	4.1	3.8	3.6	3.0
163°	2.6	2.7	2.7	3.6	4.0	4.3	4.2	4.1	3.7	3.6	3.1
164°	2.7	2.9	2.7	3.7	4.1	4.2	4.1	4.0	3.7	3.7	3.1
165°	2.8	3.2	2.8	3.9	4.1	4.2	4.1	4.0	3.7	4.0	3.2
166°	3.0	3.7	2.8	4.3	4.2	4.2	4.1	4.0	3.7	4.4	3.3
167°	3.2	4.1	3.0	4.6	4.2	4.2	4.1	4.0	3.7	4.6	3.4
168°	3.0	4.2	3.2	4.6	4.2	4.2	4.0	4.0	3.8	4.5	3.6
169°	2.9	4.2	3.5	4.5	4.3	4.2	4.0	4.0	3.8	4.4	3.8
170°	2.9	4.0	3.5	4.5	4.2	4.2	4.0	4.0	3.8	4.4	3.8
171°	3.0	3.7	3.7	4.5	4.1	4.1	4.0	4.0	4.0	4.5	3.9
172°	3.1	3.3	3.7	4.7	4.0	4.1	3.9	4.0	4.1	4.6	4.1
173°	3.1	2.9	3.5	4.6	4.0	4.0	3.9	3.8	4.0	4.5	4.0
174°	3.1	3.0	3.3	4.4	4.0	4.0	4.0	3.9	3.7	4.2	3.8
175°	3.2	3.0	3.1	4.0	4.0	3.9	3.8	3.8	3.5	3.9	3.7
176°	3.2	3.1	3.1	4.0	4.0	3.9	3.7	3.7	3.5	3.9	3.7
177°	3.3	3.1	3.1	4.0	4.0	3.8	3.7	3.6	3.6	4.0	3.8
178°	3.4	3.2	3.2	4.0	4.0	3.8	3.6	3.5	3.4	4.0	3.8
179°	3.5	3.3	3.2	4.0	3.9	3.8	3.6	3.4	3.2	4.0	3.9



REPORT NUMBER: P670611
CATALOG NUMBER: MWP20FSUNVDBZ-15W-4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
180°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5



REPORT NUMBER: P670611
CATALOG NUMBER: MWP20FSUNVDBZ-15W-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
0°	672.1	672.1
1°	695.8	693.8
2°	715.2	712.4
3°	734.8	734.3
4°	755.8	756.1
5°	776.9	791.3
6°	809.4	818.6
7°	829.9	820.6
8°	832.1	837.8
9°	844.2	854.4
10°	855.0	872.8
11°	866.6	885.7
12°	877.7	894.4
13°	882.5	905.1
14°	889.1	916.1
15°	891.9	922.3
16°	892.1	927.5
17°	891.1	930.6
18°	888.3	929.5
19°	884.1	929.1
20°	877.1	925.6
21°	867.1	917.8
22°	857.5	913.3
23°	848.4	900.9
24°	835.1	892.6
25°	822.1	880.6
26°	809.1	865.2
27°	794.1	848.7
28°	778.4	834.8
29°	761.7	819.1
30°	747.0	806.3
31°	732.3	792.6
32°	718.1	775.9
33°	704.8	764.1
34°	693.6	751.6
35°	681.5	741.3
36°	670.9	731.1
37°	661.1	720.4
38°	652.4	709.0
39°	644.2	701.0
40°	638.8	692.9
41°	633.2	686.3
42°	624.5	678.7
43°	620.7	670.4
44°	613.5	666.0



REPORT NUMBER: P670611
CATALOG NUMBER: MWP20FSUNVDBZ-15W-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
45°	609.5	658.6
46°	603.4	653.5
47°	598.4	648.3
48°	594.3	640.3
49°	590.4	636.7
50°	588.6	631.4
51°	584.2	626.9
52°	582.1	620.9
53°	576.7	615.1
54°	571.3	612.0
55°	566.2	605.7
56°	559.1	600.3
57°	553.7	593.5
58°	548.2	588.0
59°	542.9	582.1
60°	535.8	575.4
61°	532.3	569.6
62°	525.5	564.2
63°	519.7	557.2
64°	514.5	547.9
65°	507.5	541.1
66°	500.3	534.4
67°	493.1	527.0
68°	486.2	520.1
69°	478.3	513.9
70°	470.4	505.9
71°	461.3	496.6
72°	451.7	488.7
73°	441.3	479.3
74°	431.4	470.0
75°	422.9	461.5
76°	415.5	450.9
77°	408.1	443.5
78°	399.8	434.4
79°	390.4	424.5
80°	379.7	414.6
81°	369.6	403.1
82°	358.3	392.1
83°	346.0	379.9
84°	335.6	368.8
85°	325.3	357.4
86°	315.5	347.3
87°	306.3	337.4
88°	296.9	328.0
89°	289.7	319.8



REPORT NUMBER: P670611
CATALOG NUMBER: MWP20FSUNVDBZ-15W-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
90°	282.1	310.6
91°	274.3	302.8
92°	267.4	295.2
93°	260.8	288.2
94°	253.9	281.3
95°	248.0	273.5
96°	241.5	266.7
97°	234.5	259.6
98°	228.2	252.2
99°	221.4	244.9
100°	213.9	237.8
101°	207.0	230.0
102°	196.3	222.5
103°	180.3	215.0
104°	160.8	204.8
105°	138.7	189.8
106°	124.7	170.3
107°	114.0	148.9
108°	109.1	132.9
109°	103.6	115.0
110°	97.0	107.6
111°	86.1	97.1
112°	74.9	89.7
113°	66.4	82.8
114°	65.0	74.7
115°	67.2	66.5
116°	68.7	60.8
117°	70.4	56.9
118°	70.2	57.2
119°	67.9	63.7
120°	65.5	64.7
121°	62.9	64.9
122°	60.6	64.2
123°	58.5	62.5
124°	56.4	61.0
125°	54.5	60.0
126°	52.8	58.9
127°	51.5	57.4
128°	50.6	56.0
129°	49.8	54.5
130°	48.9	53.4
131°	47.6	52.6
132°	46.1	52.2
133°	44.4	52.2
134°	42.6	51.9



REPORT NUMBER: P670611
CATALOG NUMBER: MWP20FSUNVDBZ-15W-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
135°	40.8	51.4
136°	38.5	50.5
137°	35.9	49.3
138°	33.4	47.8
139°	31.1	46.0
140°	28.9	44.0
141°	26.8	41.4
142°	24.8	38.7
143°	22.8	36.1
144°	20.9	33.6
145°	18.9	31.1
146°	17.0	28.7
147°	15.3	26.3
148°	13.8	23.9
149°	12.2	21.5
150°	10.4	19.3
151°	8.9	17.1
152°	7.5	15.3
153°	6.4	13.7
154°	4.7	12.1
155°	3.3	10.8
156°	2.6	9.5
157°	2.3	7.8
158°	2.4	5.0
159°	2.5	3.2
160°	2.5	2.4
161°	2.6	2.4
162°	2.7	2.5
163°	2.9	2.6
164°	3.2	2.7
165°	3.6	2.8
166°	3.9	3.0
167°	4.3	3.2
168°	4.6	3.0
169°	4.6	2.9
170°	4.2	2.9
171°	3.9	3.0
172°	3.5	3.1
173°	3.4	3.1
174°	3.4	3.1
175°	3.5	3.2
176°	3.5	3.2
177°	3.6	3.3
178°	3.6	3.4
179°	3.7	3.5

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



REPORT NUMBER: P670611
CATALOG NUMBER: MWP20FSUNVDBZ-15W-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
180°	3.5	3.5

(END OF REPORT)