

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: INVUE

Report Number: P151663

Luminaire Tested: **VWM-F04-LED-E1-SL4-HSS-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P151663
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: VWM-F04-LED-E1-SL4-HSS-8030
Description: VISION WALL MEDIUM LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (28) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5670.9 lumens
Efficiency: N/A
Efficacy: 55.5 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G2

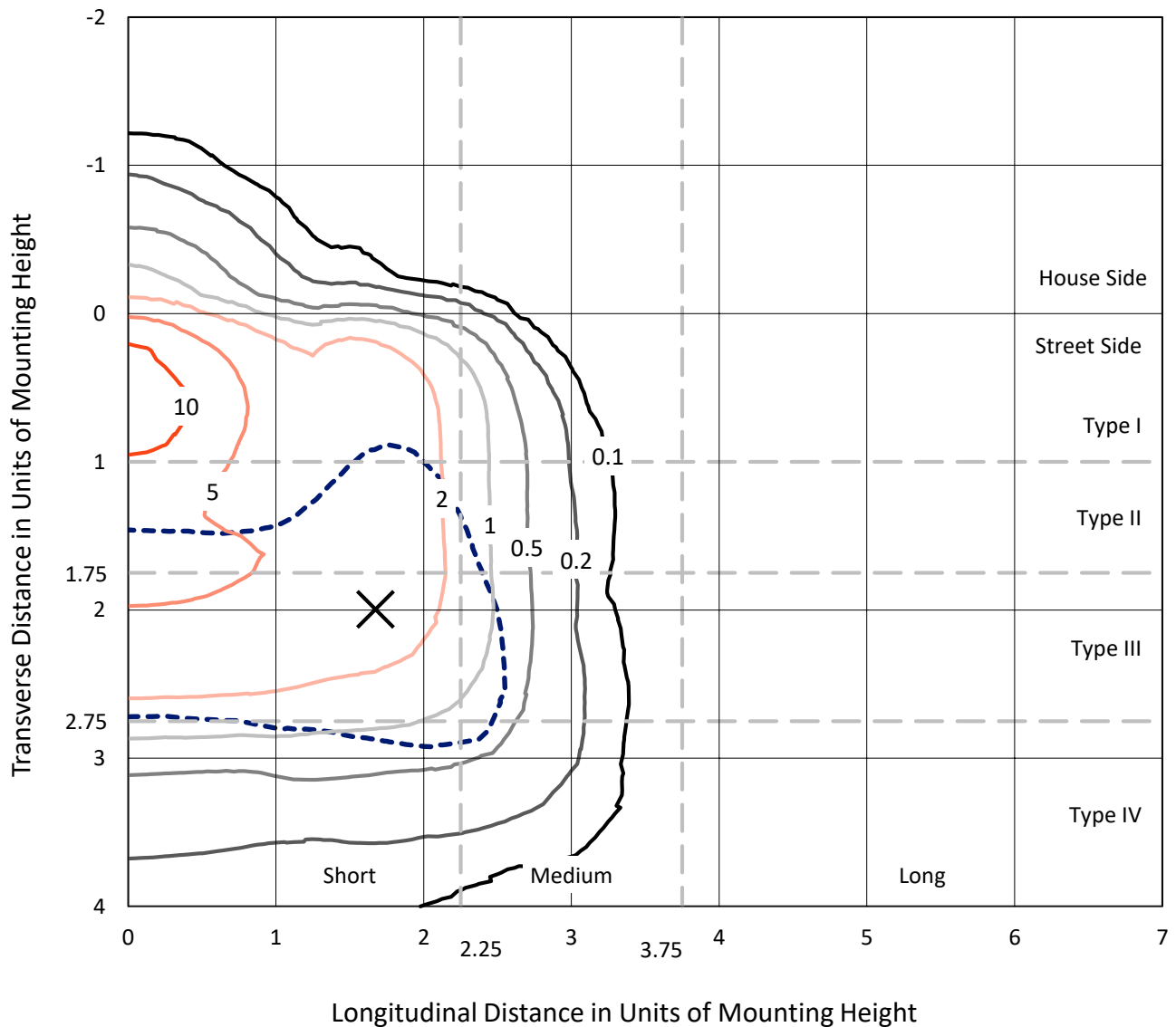
Input Watts (W): 102.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

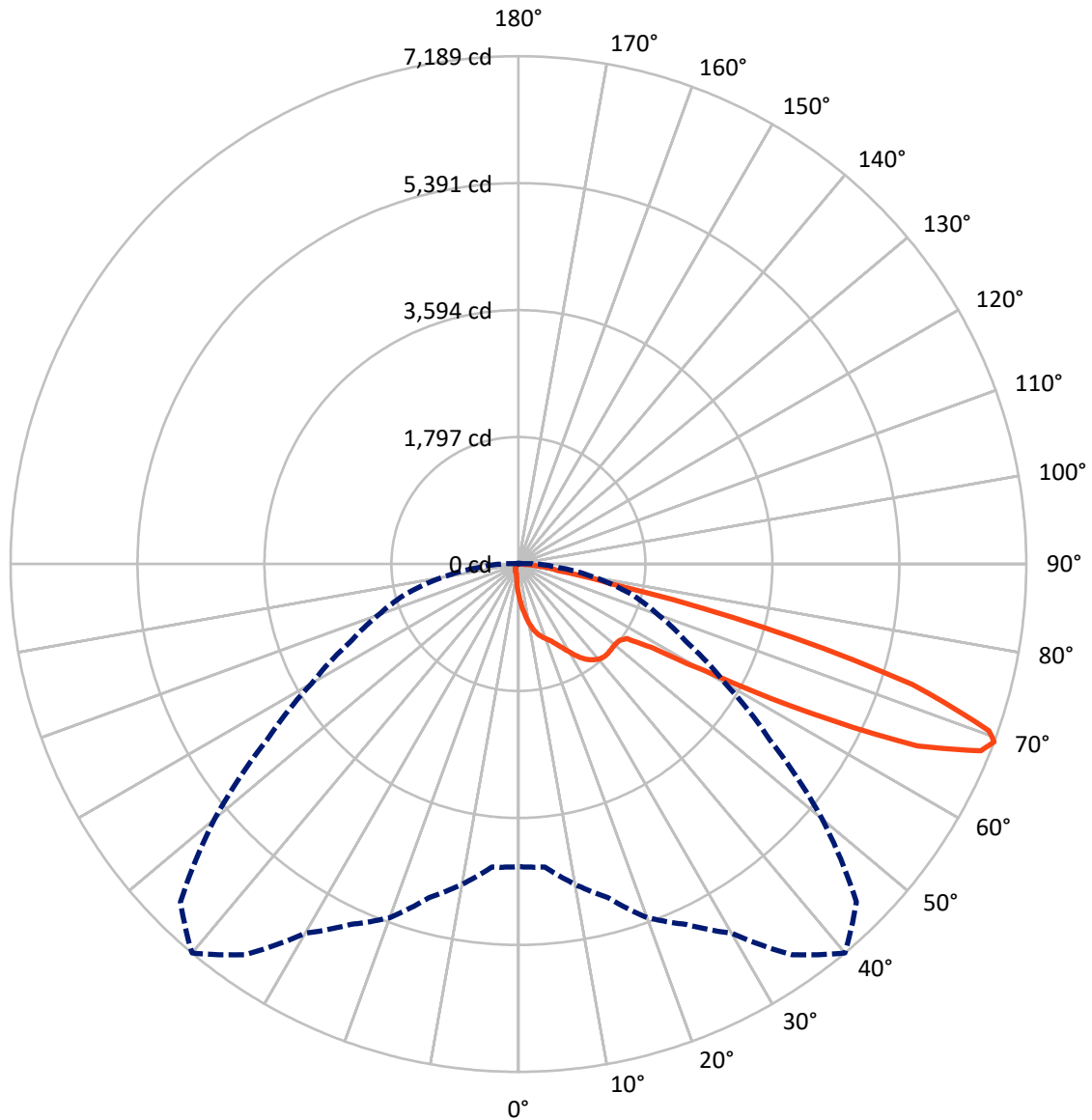
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.7 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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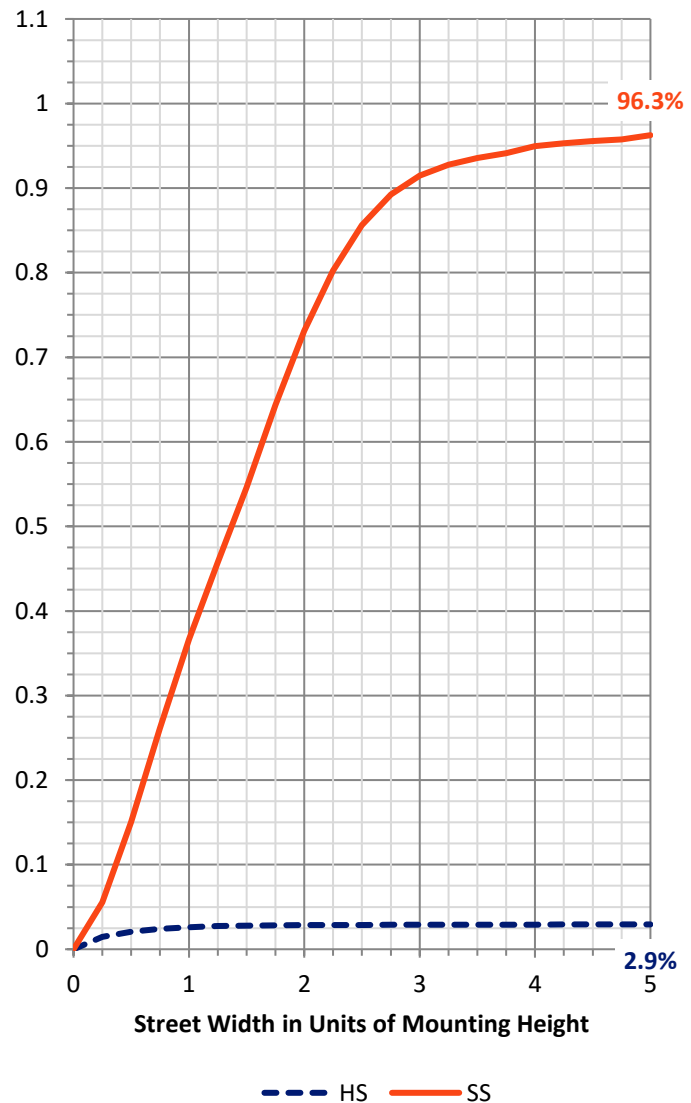
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	168.9	0.0	168.9
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	5502.0	0.0	5502.0
	% Fixture	97.0	0.0	97.0
Total	Lumens	5670.9	0.0	5670.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.0	0.8
10°-20°	151.8	2.7
20°-30°	290.5	5.1
30°-40°	483.1	8.5
40°-50°	653.7	11.5
50°-60°	1022.3	18.0
60°-70°	2101.7	37.1
70°-80°	845.7	14.9
80°-90°	78.2	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	5670.9	100.0
0°-180°	5670.9	100.0



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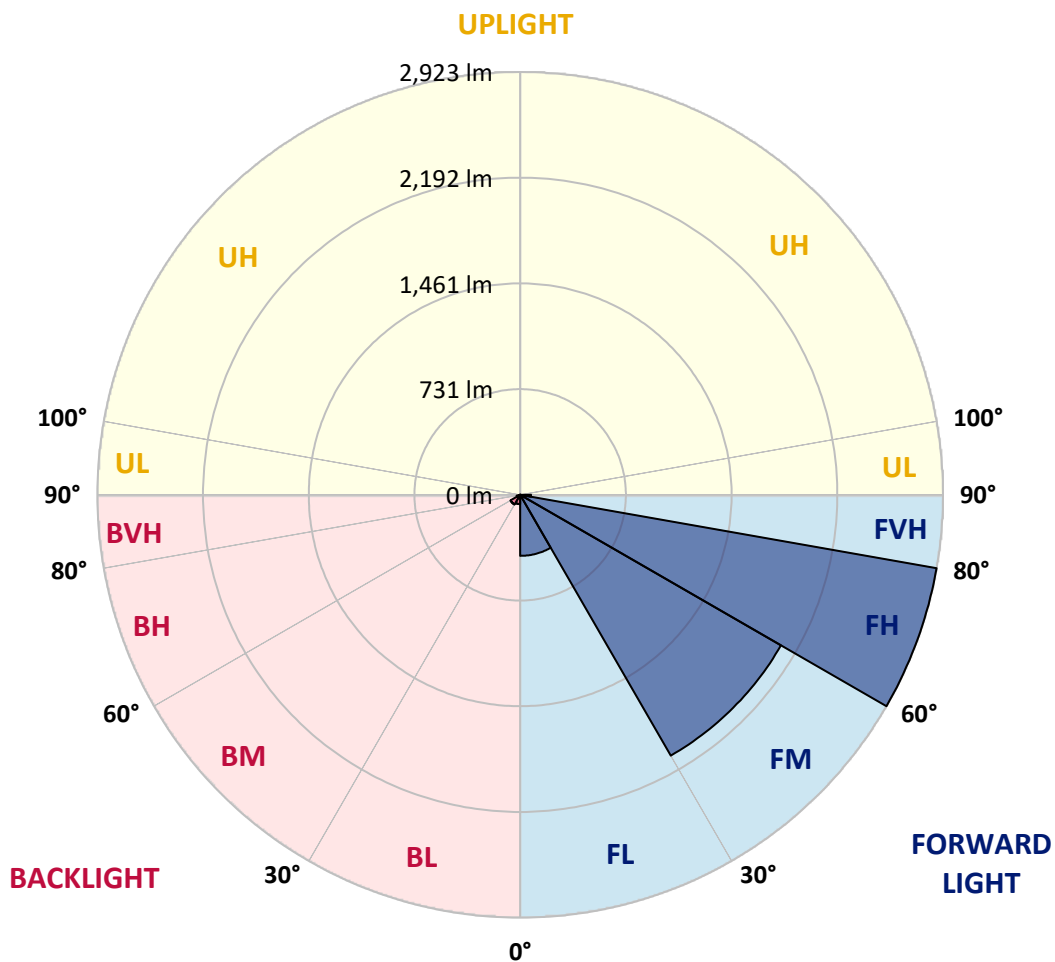
CATALOG NUMBER: VWM-F04-LED-E1-SL4-HSS-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	422.0	7.4			
FM	(30°-60°)	2081.9	36.7			
FH	(60°-80°)	2922.8	51.5			G2/5000
FVH	(80°-90°)	75.3	1.3			G1/100
BL	(0°-30°)	64.2	1.1	B0/110		
BM	(30°-60°)	77.1	1.4	B0/220		
BH	(60°-80°)	24.6	0.4	B0/110		G0/110
BVH	(80°-90°)	2.9	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	428.3	428.3	428.3	428.3	428.3	428.3	428.3	428.3	428.3	428.3	428.3
2.5°	571.3	564.8	557.4	557.4	548.1	548.1	542.5	527.7	525.8	517.4	509.1
5°	729.2	723.7	714.4	706.0	698.6	685.6	676.3	658.6	639.1	620.6	603.8
7.5°	883.5	880.7	864.0	861.2	849.1	827.7	809.1	783.1	749.7	723.7	693.0
10°	1026.5	1020.0	1016.3	1000.5	982.9	959.6	930.8	899.3	860.2	819.4	775.7
12.5°	1139.9	1136.1	1119.4	1112.9	1094.3	1071.1	1034.9	994.0	955.0	902.0	850.9
15°	1224.4	1217.9	1206.7	1196.5	1174.2	1153.8	1120.4	1075.8	1028.4	970.8	909.5
17.5°	1295.0	1282.9	1280.1	1264.3	1241.1	1217.0	1179.8	1138.9	1083.2	1025.6	958.7
20°	1389.8	1373.0	1367.5	1344.2	1317.3	1283.9	1241.1	1190.0	1131.5	1068.3	999.6
22.5°	1501.2	1489.2	1477.1	1456.6	1422.3	1374.9	1312.6	1256.9	1182.6	1112.9	1038.6
25°	1659.2	1648.9	1629.4	1601.6	1558.8	1502.2	1426.9	1345.2	1257.8	1168.7	1081.3
27.5°	1812.4	1803.2	1789.2	1767.9	1719.5	1657.3	1564.4	1460.4	1349.8	1242.0	1145.4
30°	1956.4	1948.1	1934.1	1912.8	1870.0	1808.7	1703.8	1592.3	1454.8	1329.4	1213.2
32.5°	2111.6	2108.8	2093.0	2062.3	2025.2	1942.5	1828.2	1708.4	1569.0	1424.1	1288.5
35°	2287.2	2265.8	2250.9	2220.3	2157.1	2068.8	1935.1	1804.1	1657.3	1508.7	1357.2
37.5°	2435.8	2415.3	2396.8	2357.8	2280.6	2168.2	2016.8	1872.8	1721.4	1570.0	1415.8
40°	2544.5	2534.3	2512.0	2460.9	2374.5	2240.7	2077.2	1920.2	1767.9	1615.5	1463.1
42.5°	2625.3	2609.5	2584.4	2531.5	2429.3	2276.9	2101.4	1939.7	1789.2	1643.4	1493.8
45°	2655.0	2642.0	2618.8	2561.2	2450.7	2287.2	2100.4	1934.1	1790.1	1651.7	1514.2
47.5°	2637.4	2624.4	2603.9	2550.1	2441.4	2275.1	2083.7	1918.3	1780.9	1654.5	1532.8
50°	2578.9	2571.4	2555.6	2510.1	2412.6	2251.8	2068.8	1910.0	1779.0	1668.4	1558.8
52.5°	2573.3	2568.6	2549.1	2503.6	2404.2	2244.4	2067.0	1914.6	1794.8	1686.1	1577.4
55°	3144.6	3078.6	2930.9	2805.5	2599.3	2354.0	2160.8	1989.9	1861.7	1755.8	1679.6
57.5°	4469.3	4370.9	4176.7	3937.9	3464.2	2998.7	2626.2	2356.8	2224.0	2175.7	2204.5
60°	5089.9	5072.2	5041.6	4928.2	4685.8	4285.4	3839.5	3357.3	3164.1	3147.4	3205.9
62.5°	5384.4	5373.2	5382.5	5368.6	5293.3	5176.3	5048.1	4840.0	4648.6	4525.1	4263.1
65°	5520.0	5527.4	5580.4	5622.2	5631.5	5662.1	5756.0	6015.2	6204.7	5886.0	5158.6
67.5°	5175.4	5219.0	5340.7	5493.1	5671.4	5844.2	6122.9	6669.2	7058.4	6684.0	5651.0
69°	4284.5	4305.8	4603.1	4890.2	5325.8	5630.6	6034.7	6750.9	7188.5	6765.8	5612.0
70°	3373.1	3392.6	3711.3	4101.4	4838.1	5230.2	5758.8	6612.5	7066.8	6657.1	5411.3
72.5°	1521.7	1493.8	1606.2	1815.2	2616.0	3238.4	4162.8	5357.4	5830.3	5333.3	4048.5
75°	1062.8	1050.7	1062.8	1063.7	1188.2	1532.8	1934.1	2904.0	3591.4	3099.1	1934.1
77.5°	823.1	814.7	806.4	797.1	811.9	909.5	948.5	1030.2	1337.7	1265.3	737.6
80°	651.2	643.8	664.2	657.7	657.7	668.9	661.4	630.8	573.2	531.4	475.6
82.5°	302.8	304.7	304.7	330.7	398.5	465.4	486.8	456.1	405.0	344.7	277.8
85°	28.8	32.5	54.8	84.5	168.1	189.5	190.4	157.9	157.9	124.5	100.3
87.5°	0.0	0.9	0.9	0.9	8.4	23.2	19.5	5.6	2.8	2.8	4.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	428.3	428.3	428.3	428.3	428.3	428.3	428.3	428.3	428.3	428.3	428.3
2.5°	494.2	491.4	480.3	469.1	458.9	447.8	437.5	427.3	416.2	407.8	397.6
5°	577.8	557.4	534.2	511.9	489.6	466.3	442.2	420.8	398.5	378.1	358.6
7.5°	662.4	622.4	590.8	550.9	514.7	478.4	445.0	410.6	379.0	349.3	321.4
10°	733.9	685.6	636.4	585.3	533.2	484.9	438.5	397.6	355.8	319.6	285.2
12.5°	792.4	731.1	670.7	606.6	548.1	486.8	429.2	380.0	330.7	289.8	254.5
15°	845.4	774.8	702.3	628.0	553.7	484.0	419.9	358.6	308.4	262.0	222.0
17.5°	888.1	807.3	725.5	641.9	562.0	480.3	407.8	343.7	285.2	236.9	197.9
20°	925.3	840.7	752.5	658.6	567.6	479.4	397.6	325.1	264.8	213.7	175.6
22.5°	959.6	875.1	780.3	680.0	576.0	478.4	388.3	311.2	247.1	196.0	157.9
25°	998.7	909.5	810.1	702.3	590.8	482.1	382.7	300.1	231.3	179.3	144.0
27.5°	1042.3	948.5	845.4	730.2	610.3	489.6	380.9	288.0	217.4	163.5	132.8
30°	1103.6	994.9	880.7	758.0	628.0	497.9	379.0	280.6	203.4	151.4	121.7
32.5°	1157.5	1040.5	919.7	786.8	647.5	506.3	378.1	270.3	190.4	139.3	113.3
35°	1214.2	1082.3	953.1	814.7	664.2	515.6	377.2	262.9	178.4	127.3	105.0
37.5°	1263.4	1117.6	979.1	838.9	682.8	523.9	378.1	256.4	167.2	117.1	97.5
40°	1305.2	1153.8	1007.9	861.2	702.3	537.0	379.0	249.9	156.1	107.8	91.0
42.5°	1342.4	1188.2	1038.6	886.2	724.6	551.8	384.6	244.3	146.8	99.4	84.5
45°	1371.2	1219.8	1072.0	921.5	760.8	576.0	394.8	240.6	137.5	92.0	79.0
47.5°	1400.9	1266.2	1128.7	977.3	813.8	614.1	412.5	239.7	130.1	86.4	74.3
50°	1441.8	1312.6	1178.9	1034.0	862.1	653.1	433.8	240.6	120.8	80.8	69.7
52.5°	1471.5	1360.0	1243.9	1132.4	977.3	772.0	516.5	257.3	116.1	76.2	64.1
55°	1647.1	1627.6	1630.4	1648.9	1529.1	1313.6	864.0	371.6	136.6	86.4	63.2
57.5°	2322.5	2391.2	2431.1	2430.2	2232.3	1851.5	1160.3	477.5	152.4	100.3	75.2
60°	3210.6	3158.5	3085.1	2904.0	2641.1	2113.4	1297.8	513.7	131.9	79.9	68.7
62.5°	3995.5	3690.8	3420.5	3126.9	2782.3	2204.5	1325.7	510.9	115.2	60.4	48.3
65°	4485.1	3937.0	3500.4	3132.5	2726.6	2128.3	1254.1	469.1	97.5	49.2	39.9
67.5°	4602.2	3804.2	3186.4	2717.3	2277.9	1656.4	920.6	353.0	76.2	40.9	35.3
69°	4346.7	3381.5	2640.2	2107.9	1657.3	1099.0	569.5	223.0	58.5	37.2	32.5
70°	3998.3	2941.2	2150.6	1691.7	1227.2	772.0	398.5	157.0	47.4	34.4	29.7
72.5°	2572.3	1544.9	1057.2	735.8	506.3	307.5	156.1	70.6	36.2	28.8	24.2
75°	997.7	571.3	414.3	314.9	246.2	170.9	94.8	45.5	30.7	24.2	18.6
77.5°	491.4	376.2	307.5	210.9	122.6	76.2	51.1	35.3	25.1	17.7	12.1
80°	388.3	258.3	154.2	95.7	72.5	54.8	39.0	28.8	18.6	11.1	8.4
82.5°	198.8	108.7	79.9	65.0	53.9	42.7	31.6	20.4	12.1	7.4	6.5
85°	62.2	45.5	40.9	39.9	37.2	30.7	22.3	13.0	7.4	4.6	4.6
87.5°	4.6	6.5	8.4	6.5	7.4	6.5	8.4	5.6	3.7	3.7	2.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	428.3	428.3	428.3	428.3	428.3	428.3	428.3	428.3	428.3	428.3	428.3
2.5°	390.2	379.0	368.8	362.3	350.2	345.6	340.9	339.1	330.7	332.6	325.1
5°	340.9	321.4	306.6	291.7	277.8	267.5	259.2	249.0	240.6	236.9	229.5
7.5°	296.3	271.3	251.8	236.0	219.2	206.2	195.1	187.7	180.2	172.8	169.1
10°	257.3	230.4	208.1	192.3	176.5	165.4	157.0	151.4	146.8	144.0	143.1
12.5°	221.1	195.1	174.6	160.7	148.6	143.1	139.3	136.6	135.6	134.7	134.7
15°	193.2	167.2	151.4	141.2	135.6	132.8	131.9	130.1	128.2	127.3	127.3
17.5°	167.2	147.7	136.6	131.0	128.2	126.3	124.5	122.6	120.8	119.8	119.8
20°	149.6	133.8	128.2	124.5	121.7	119.8	117.1	115.2	114.3	113.3	112.4
22.5°	135.6	125.4	121.7	118.9	115.2	112.4	110.5	108.7	106.8	105.9	105.0
25°	125.4	118.9	116.1	112.4	108.7	105.9	103.1	100.3	98.5	97.5	95.7
27.5°	118.0	113.3	109.6	105.0	101.3	98.5	95.7	92.9	91.0	89.2	88.3
30°	111.5	106.8	102.2	98.5	93.8	91.0	87.3	84.5	83.6	81.8	79.9
32.5°	105.0	100.3	95.7	91.0	86.4	82.7	80.8	77.1	75.2	74.3	72.5
35°	97.5	92.9	87.3	83.6	79.0	75.2	72.5	69.7	67.8	66.0	65.0
37.5°	91.0	85.5	79.9	75.2	71.5	67.8	65.0	62.2	60.4	58.5	57.6
40°	83.6	78.0	72.5	67.8	64.1	61.3	58.5	55.7	53.9	53.0	53.0
42.5°	77.1	70.6	65.0	61.3	58.5	54.8	52.0	49.2	48.3	47.4	48.3
45°	70.6	64.1	59.5	55.7	53.0	49.2	46.4	44.6	43.7	44.6	45.5
47.5°	65.0	58.5	53.9	51.1	48.3	45.5	42.7	40.9	40.9	42.7	44.6
50°	59.5	53.0	49.2	47.4	44.6	41.8	38.1	37.2	38.1	39.9	41.8
52.5°	53.9	46.4	43.7	42.7	39.9	37.2	34.4	33.4	34.4	36.2	35.3
55°	48.3	40.9	39.9	39.0	36.2	32.5	29.7	29.7	29.7	28.8	26.9
57.5°	46.4	36.2	35.3	34.4	31.6	27.9	26.0	24.2	23.2	20.4	19.5
60°	48.3	32.5	32.5	30.7	27.9	24.2	21.4	18.6	16.7	14.9	14.9
62.5°	39.0	29.7	28.8	26.9	23.2	19.5	16.7	13.9	13.0	12.1	12.1
65°	31.6	26.9	25.1	22.3	19.5	15.8	13.0	11.1	10.2	10.2	11.1
67.5°	28.8	24.2	21.4	18.6	15.8	12.1	10.2	9.3	9.3	10.2	10.2
69°	26.9	22.3	19.5	16.7	13.9	11.1	9.3	9.3	9.3	9.3	10.2
70°	25.1	21.4	18.6	15.8	12.1	9.3	8.4	8.4	9.3	9.3	10.2
72.5°	19.5	16.7	15.8	13.0	9.3	8.4	7.4	8.4	8.4	9.3	9.3
75°	14.9	12.1	12.1	10.2	7.4	6.5	6.5	7.4	7.4	8.4	8.4
77.5°	10.2	8.4	8.4	7.4	6.5	5.6	5.6	6.5	7.4	7.4	8.4
80°	7.4	6.5	5.6	6.5	5.6	4.6	5.6	6.5	6.5	7.4	7.4
82.5°	5.6	5.6	5.6	5.6	4.6	4.6	5.6	5.6	6.5	7.4	7.4
85°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	5.6	5.6	6.5	6.5
87.5°	2.8	2.8	2.8	3.7	3.7	4.6	4.6	4.6	4.6	5.6	5.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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 CATALOG NUMBER: VWM-F04-LED-E1-SL4-HSS-8030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	428.3	428.3	428.3	428.3
2.5°	323.3	322.4	318.6	319.6
5°	226.7	221.1	224.8	223.9
7.5°	166.3	165.4	164.4	166.3
10°	142.1	142.1	141.2	142.1
12.5°	133.8	133.8	133.8	133.8
15°	127.3	127.3	126.3	126.3
17.5°	119.8	119.8	119.8	118.9
20°	112.4	111.5	111.5	111.5
22.5°	104.0	103.1	103.1	103.1
25°	95.7	94.8	94.8	94.8
27.5°	87.3	86.4	85.5	85.5
30°	79.0	78.0	77.1	77.1
32.5°	70.6	69.7	68.7	68.7
35°	63.2	63.2	62.2	61.3
37.5°	56.7	56.7	56.7	56.7
40°	52.0	53.0	53.0	53.0
42.5°	49.2	50.2	51.1	52.0
45°	47.4	49.2	50.2	50.2
47.5°	46.4	47.4	48.3	48.3
50°	42.7	41.8	41.8	41.8
52.5°	34.4	32.5	31.6	30.7
55°	25.1	24.2	22.3	22.3
57.5°	17.7	17.7	16.7	16.7
60°	13.9	13.9	13.0	13.9
62.5°	12.1	12.1	12.1	12.1
65°	11.1	11.1	11.1	11.1
67.5°	11.1	11.1	11.1	11.1
69°	10.2	10.2	10.2	10.2
70°	10.2	10.2	10.2	10.2
72.5°	9.3	9.3	9.3	9.3
75°	8.4	9.3	9.3	9.3
77.5°	8.4	8.4	8.4	8.4
80°	7.4	7.4	8.4	8.4
82.5°	7.4	7.4	7.4	7.4
85°	6.5	6.5	7.4	7.4
87.5°	5.6	5.6	6.5	6.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)