

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: P149353

Luminaire Tested: **VWM-F01-LED-E1-SL2-HSS-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P149353
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33726)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: VWM-F01-LED-E1-SL2-HSS-8030
Description: VISION WALL MEDIUM LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (7) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1277.5 lumens
Efficiency: N/A
Efficacy: 49.3 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B0 - U0 - G1

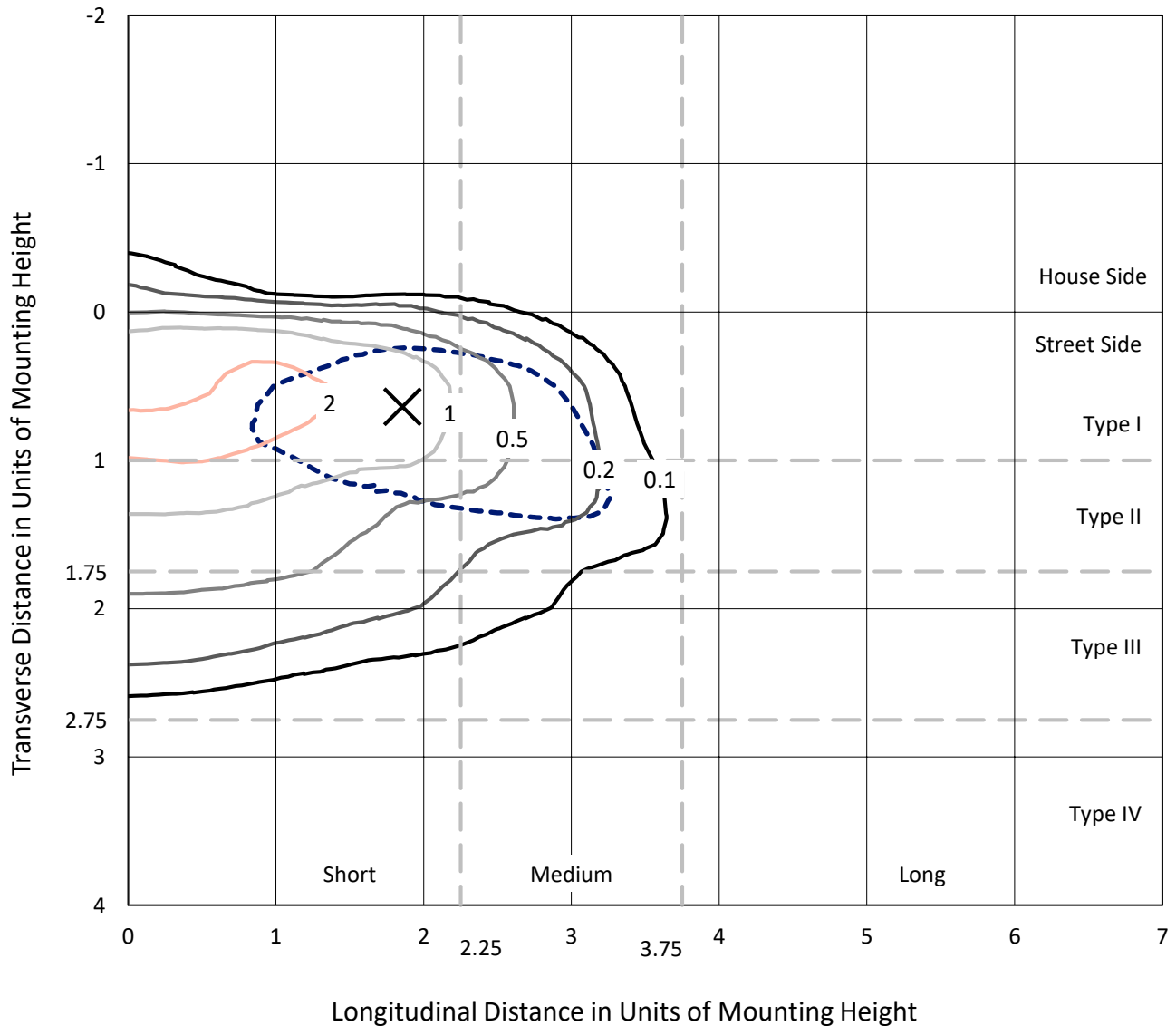
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P149353
 CATALOG NUMBER: VWM-F01-LED-E1-SL2-HSS-8030

Iso-Footcandle Lines of Horizontal Illumination

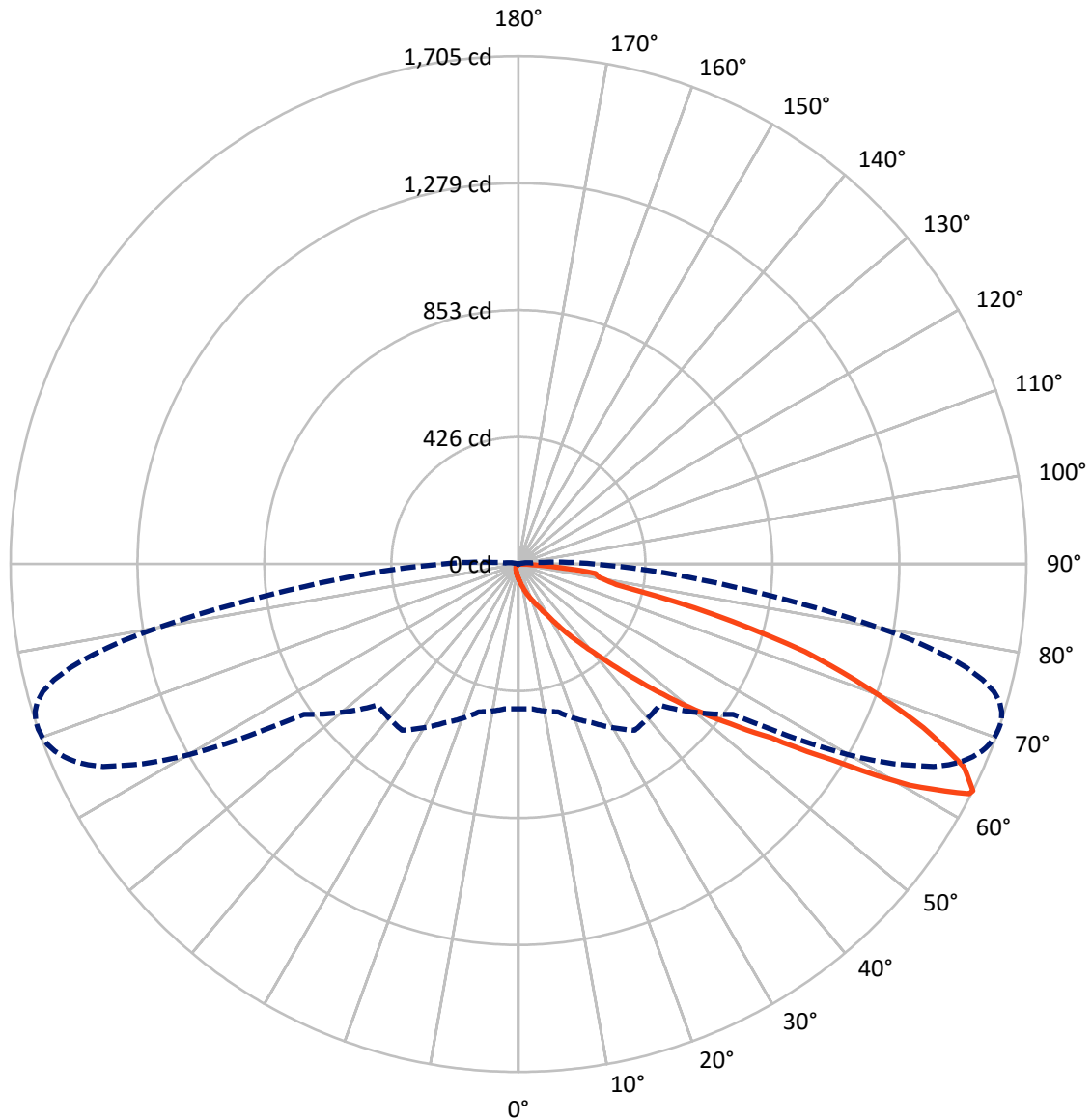
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.7 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P149353
CATALOG NUMBER: VWM-F01-LED-E1-SL2-HSS-8030

Luminous Intensity Polar Plot



— Vertical Plane Through 71-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

REPORT NUMBER: P149353

CATALOG NUMBER: VWM-F01-LED-E1-SL2-HSS-8030

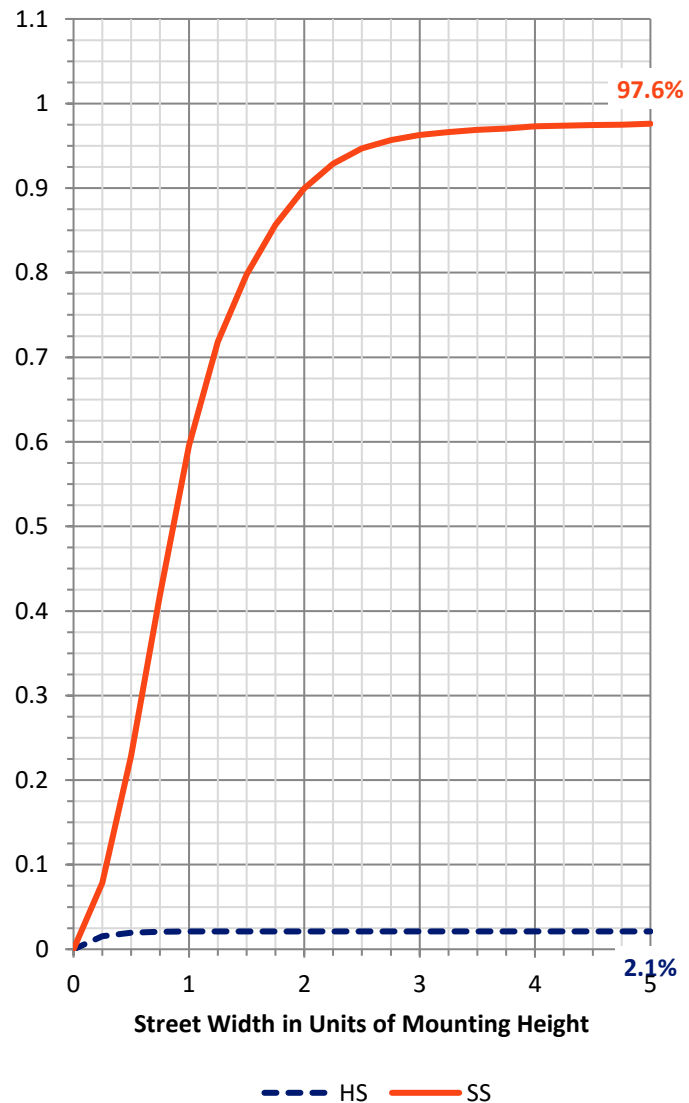
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	27.1	0.0	27.1
	% Fixture	2.1	0.0	2.1
Street Side	Lumens	1250.4	0.0	1250.4
	% Fixture	97.9	0.0	97.9
Total	Lumens	1277.5	0.0	1277.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.4	0.4
10°-20°	21.0	1.6
20°-30°	42.7	3.3
30°-40°	104.2	8.2
40°-50°	233.1	18.2
50°-60°	327.8	25.7
60°-70°	385.5	30.2
70°-80°	139.2	10.9
80°-90°	18.6	1.5
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°	1277.5	100.0
0°-180°	1277.5	100.0



REPORT NUMBER: P149353

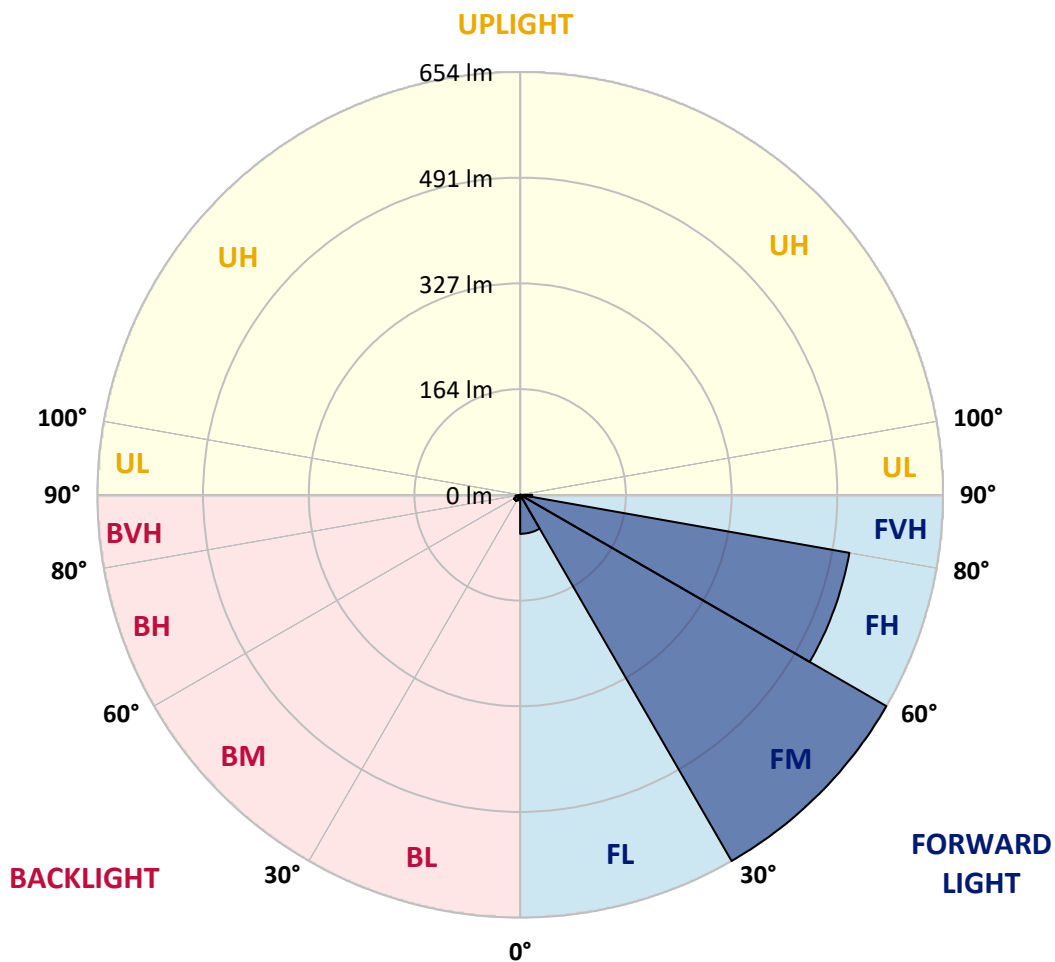
CATALOG NUMBER: VWM-F01-LED-E1-SL2-HSS-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	60.4	4.7			
FM	(30°-60°)	654.2	51.2			
FH	(60°-80°)	517.2	40.5			G0/660
FVH	(80°-90°)	18.6	1.5			G1/100
BL	(0°-30°)	8.7	0.7	B0/110		
BM	(30°-60°)	10.9	0.9	B0/220		
BH	(60°-80°)	7.4	0.6	B0/110		G0/110
BVH	(80°-90°)	0.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type II Short





REPORT NUMBER: P149353

CATALOG NUMBER: VWM-F01-LED-E1-SL2-HSS-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
2.5°	64.1	64.8	64.3	63.2	61.8	59.9	58.3	58.3	58.1	57.4	57.6
5°	84.1	84.3	83.4	80.6	78.0	74.1	69.7	69.2	68.7	68.0	67.8
7.5°	103.6	104.5	103.6	100.6	95.5	89.4	82.4	81.8	80.4	80.4	79.4
10°	123.6	123.6	122.6	119.1	114.5	105.9	97.1	95.9	94.3	93.8	92.4
12.5°	137.7	137.7	137.3	135.4	131.7	124.0	113.3	112.2	110.1	109.4	107.8
15°	143.3	143.3	143.5	145.2	145.4	141.9	130.8	129.8	127.7	125.9	125.2
17.5°	146.8	146.5	146.5	148.9	153.0	155.4	148.2	147.2	144.9	144.0	141.7
20°	154.4	154.0	152.6	152.6	156.5	164.7	164.7	164.4	161.9	161.2	160.0
22.5°	165.8	165.4	161.2	157.7	159.6	169.8	179.3	178.8	177.9	177.0	176.3
25°	184.4	182.8	175.6	165.4	163.7	174.6	190.4	191.6	192.3	192.3	192.8
27.5°	212.5	210.4	197.6	178.6	171.4	182.5	202.8	205.1	207.2	207.6	209.7
30°	251.5	247.8	229.5	201.6	185.1	194.2	220.9	223.4	226.4	227.4	230.6
32.5°	315.6	313.5	295.9	254.1	218.8	216.9	246.2	249.4	253.4	255.0	259.0
35°	413.2	413.6	399.2	361.6	312.8	287.3	291.5	294.3	295.6	300.5	302.6
37.5°	479.4	480.5	483.8	468.9	434.1	408.1	375.3	378.3	371.1	371.8	372.1
40°	515.6	519.3	538.3	552.7	550.0	534.9	508.6	510.2	496.8	493.8	479.1
42.5°	539.7	544.6	575.0	619.6	642.4	656.1	650.1	649.4	638.9	635.0	622.6
45°	554.8	559.2	597.6	663.3	715.8	755.7	772.2	774.1	765.2	761.3	751.1
47.5°	554.1	559.2	600.4	679.5	756.9	820.8	867.2	869.5	874.9	871.4	872.1
50°	523.5	528.4	569.7	651.9	744.8	850.5	935.5	942.9	951.5	957.3	960.1
52.5°	486.3	489.8	526.5	604.5	693.3	838.2	975.9	988.7	1001.4	1012.4	1020.0
55°	472.6	476.6	505.4	570.2	651.9	786.6	994.7	1013.5	1031.6	1049.5	1064.1
57.5°	479.8	483.5	504.2	553.9	627.3	732.3	1000.0	1029.3	1059.0	1088.1	1116.9
60°	506.3	510.2	527.9	569.0	620.8	700.9	979.1	1027.7	1077.2	1127.8	1175.4
62.5°	495.8	497.5	523.5	595.5	667.2	674.2	903.2	971.0	1046.5	1124.5	1201.4
63°	485.9	487.7	514.2	588.3	681.4	670.3	879.7	951.3	1030.9	1115.0	1198.6
65°	440.6	440.8	461.0	519.5	665.6	677.2	775.2	843.5	935.0	1035.8	1141.5
67.5°	328.9	327.2	346.7	391.3	522.6	677.5	665.4	703.7	767.3	856.8	951.5
70°	116.6	114.0	145.6	207.4	325.6	554.1	571.8	574.3	592.0	640.3	699.8
72.5°	37.9	38.6	46.4	75.9	150.0	373.0	517.7	509.8	505.1	504.9	512.8
75°	15.1	15.3	18.6	33.7	67.4	179.8	453.3	457.8	459.4	461.7	464.3
77.5°	7.2	7.9	10.5	18.8	33.4	88.9	324.4	361.8	383.2	399.7	409.7
80°	2.6	3.0	5.8	11.6	15.6	40.9	170.9	206.2	237.6	278.0	312.8
82.5°	0.0	0.0	1.2	8.1	8.6	16.5	70.1	82.2	94.1	121.9	156.5
85°	0.0	0.0	0.0	2.3	2.6	2.8	23.7	28.6	32.0	37.4	43.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	1.4	3.5	5.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P149353
 CATALOG NUMBER: VWM-F01-LED-E1-SL2-HSS-8030

CANDELA DISTRIBUTION (continued):

	60°	61°	62°	64°	65°	66°	67°	68°	69°	70°	71°
0°	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
2.5°	57.1	56.9	56.9	56.4	56.2	55.7	55.5	54.8	54.6	54.6	54.6
5°	67.6	66.7	66.2	65.0	64.3	64.1	62.9	62.5	61.8	62.0	60.8
7.5°	79.2	77.6	76.9	75.2	74.8	73.2	72.7	71.5	70.8	69.4	69.0
10°	92.0	89.9	88.7	86.2	85.5	84.3	82.9	81.5	80.4	79.0	78.3
12.5°	106.6	104.7	103.8	100.3	98.7	97.1	95.2	93.4	91.5	90.3	88.7
15°	123.8	120.8	119.8	116.6	113.8	111.7	109.2	106.8	105.4	103.1	101.5
17.5°	140.7	137.7	137.0	132.1	129.1	127.7	124.9	121.9	119.4	117.1	114.5
20°	157.7	155.6	153.7	149.1	145.8	143.5	139.8	136.8	134.7	131.5	128.2
22.5°	174.6	172.6	171.2	166.3	163.3	160.0	156.8	153.5	150.5	146.5	142.8
25°	192.1	190.7	190.0	185.6	182.8	179.8	176.5	172.8	169.1	164.7	160.7
27.5°	210.2	210.6	209.3	208.3	205.3	203.2	198.1	195.6	192.8	187.4	182.5
30°	233.2	234.6	234.1	234.8	232.9	231.5	227.6	224.3	221.1	216.0	210.4
32.5°	262.2	264.1	265.0	267.5	266.6	266.2	265.0	260.3	258.0	249.2	246.9
35°	307.0	306.1	310.0	312.1	311.2	310.7	309.4	306.8	304.0	297.7	291.9
37.5°	365.3	366.3	367.6	363.5	360.7	360.4	356.3	353.7	349.8	342.8	335.8
40°	472.2	466.3	459.8	442.2	434.5	430.1	417.8	414.3	407.6	398.1	390.9
42.5°	611.0	605.2	585.7	556.2	540.4	518.6	508.6	496.3	486.8	471.2	462.9
45°	749.0	732.3	729.9	695.6	676.1	647.3	629.4	608.7	587.1	566.7	551.8
47.5°	865.3	861.6	850.2	829.3	811.2	787.1	764.1	732.3	710.0	680.9	654.2
50°	958.5	958.2	954.1	942.0	926.9	907.4	887.2	860.2	834.9	799.4	770.8
52.5°	1028.1	1031.9	1033.3	1029.5	1023.7	1006.6	996.3	973.8	952.4	922.2	891.4
55°	1079.2	1092.9	1099.9	1107.8	1106.2	1100.1	1099.7	1085.0	1075.3	1051.4	1029.5
57.5°	1142.4	1164.9	1186.5	1224.9	1226.3	1239.7	1246.7	1253.7	1255.5	1246.0	1238.8
60°	1222.8	1268.8	1309.6	1389.8	1410.7	1443.6	1465.0	1488.2	1508.0	1509.6	1509.1
62.5°	1279.4	1350.3	1416.2	1535.1	1575.8	1613.9	1642.4	1665.0	1678.7	1692.6	1699.1
63°	1281.1	1358.6	1428.8	1551.4	1594.1	1630.4	1657.5	1678.4	1692.8	1701.2	1705.4
65°	1241.8	1335.9	1419.5	1541.6	1581.8	1618.3	1632.5	1646.2	1653.1	1656.4	1644.1
67.5°	1052.5	1144.5	1242.0	1378.6	1413.0	1456.6	1468.3	1475.2	1478.5	1477.8	1467.3
70°	787.1	864.2	972.6	1128.7	1174.2	1217.0	1243.4	1254.8	1258.5	1257.4	1241.8
72.5°	549.5	594.8	684.2	857.9	919.9	974.7	1007.5	1024.4	1027.9	1020.9	1006.6
75°	461.5	463.8	484.0	579.0	637.0	695.6	732.5	743.2	736.2	715.1	678.4
77.5°	412.0	417.1	417.1	431.3	442.7	458.9	462.4	436.4	406.2	367.2	335.6
80°	345.6	363.5	376.0	386.5	387.6	384.4	375.8	361.1	337.9	308.2	275.2
82.5°	209.9	245.3	259.7	313.5	340.0	357.9	356.5	337.0	319.3	288.4	260.3
85°	53.0	57.1	62.0	80.6	90.3	110.3	122.9	128.7	130.8	120.1	108.7
87.5°	5.1	3.5	5.8	4.4	6.3	4.6	6.3	5.8	7.2	7.7	8.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P149353
 CATALOG NUMBER: VWM-F01-LED-E1-SL2-HSS-8030

CANDELA DISTRIBUTION (continued):

	72°	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°
0°	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
2.5°	54.1	53.9	53.6	53.4	53.2	53.0	52.5	52.5	52.0	51.8	51.6
5°	60.2	59.7	59.5	59.0	58.3	57.8	57.1	56.2	55.5	55.3	54.8
7.5°	67.8	66.7	66.2	65.5	64.6	63.2	62.2	61.5	60.4	59.7	58.3
10°	76.4	75.2	73.9	72.5	71.1	69.4	68.3	67.4	65.5	64.6	62.9
12.5°	87.3	85.2	83.6	81.8	79.9	78.0	76.6	73.9	72.2	70.1	68.7
15°	98.5	96.6	94.8	92.4	89.6	86.6	85.2	82.7	80.6	77.3	75.5
17.5°	111.9	108.5	105.7	102.9	100.3	97.5	94.8	90.8	87.8	85.0	81.3
20°	125.2	121.0	118.0	114.3	110.5	106.1	102.9	100.1	95.9	92.2	88.3
22.5°	139.3	135.2	130.3	126.6	121.5	118.0	113.6	108.9	104.7	99.9	95.0
25°	156.5	152.1	146.5	141.7	135.9	131.0	125.6	120.3	115.2	109.6	103.3
27.5°	177.7	173.0	167.0	161.2	153.5	147.5	142.4	135.2	128.7	121.7	114.5
30°	204.4	199.3	191.8	183.5	175.8	169.1	161.9	152.4	145.2	136.8	127.5
32.5°	239.2	233.2	223.2	215.3	205.8	196.9	187.0	177.4	167.2	156.3	145.6
35°	283.1	277.5	265.9	254.3	243.9	233.4	220.9	209.9	195.6	182.3	168.6
37.5°	328.6	318.6	308.0	295.4	282.4	269.9	254.5	239.4	223.0	208.6	191.4
40°	380.6	368.6	359.7	346.3	327.9	310.0	295.9	277.1	256.4	237.1	216.9
42.5°	451.9	438.5	422.7	402.2	389.0	368.1	349.8	327.5	300.3	278.7	254.3
45°	534.4	516.0	500.7	481.0	465.0	438.9	417.6	387.8	360.7	332.3	302.6
47.5°	628.5	605.7	583.4	563.9	538.3	512.8	485.6	454.0	419.2	388.1	352.8
50°	736.4	704.2	673.3	648.2	613.1	583.6	554.1	518.6	480.1	444.3	404.1
52.5°	856.5	819.1	778.3	739.7	699.1	661.2	625.7	584.8	541.8	498.2	453.3
55°	1001.4	973.3	925.3	876.3	821.9	771.3	725.5	674.9	622.6	565.3	518.1
57.5°	1228.3	1214.6	1174.5	1125.5	1054.6	993.1	915.5	853.5	777.8	698.8	638.0
60°	1535.8	1518.9	1496.4	1456.6	1400.4	1316.8	1231.4	1135.0	1019.8	910.4	806.6
62.5°	1699.8	1693.8	1675.4	1648.0	1595.5	1529.6	1443.4	1337.5	1207.4	1074.6	942.2
63°	1704.7	1697.0	1681.2	1653.4	1607.1	1543.3	1458.7	1355.8	1228.6	1093.2	958.0
65°	1638.7	1635.7	1619.7	1589.3	1557.7	1508.9	1443.4	1354.9	1248.1	1120.1	985.6
67.5°	1453.4	1444.3	1419.7	1410.4	1388.4	1354.5	1304.5	1243.7	1167.3	1066.7	950.6
70°	1229.3	1215.8	1184.9	1168.4	1141.5	1120.1	1089.7	1046.3	999.1	929.0	842.4
72.5°	991.7	963.8	935.5	892.5	854.9	816.8	783.1	752.5	700.7	672.3	606.6
75°	644.0	593.4	544.8	479.8	421.3	369.5	319.1	293.6	240.4	218.8	187.9
77.5°	305.6	277.3	239.2	209.7	172.1	140.5	114.7	86.2	67.6	53.0	40.4
80°	246.6	222.7	199.7	173.0	144.7	115.4	88.5	66.2	46.9	32.5	23.0
82.5°	219.9	193.9	165.6	147.2	128.0	104.7	85.9	70.1	51.8	37.9	25.8
85°	85.5	72.0	55.5	45.3	35.3	29.0	26.2	18.1	14.2	11.1	8.6
87.5°	7.4	6.0	4.9	3.3	3.5	1.9	2.1	1.4	1.2	1.2	0.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P149353

CATALOG NUMBER: VWM-F01-LED-E1-SL2-HSS-8030

CANDELA DISTRIBUTION (continued):

	83°	84°	85°	86°	87°	88°	89°	90°	95°	105°	115°
0°	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
2.5°	51.3	51.1	50.9	50.4	50.4	49.9	49.7	49.5	48.3	45.8	43.7
5°	53.9	53.4	53.0	52.3	51.8	51.1	50.6	49.9	47.4	42.5	38.3
7.5°	57.6	56.7	56.0	54.6	53.9	53.0	52.3	51.1	46.9	39.5	33.7
10°	62.0	60.4	59.2	57.6	56.2	55.0	53.9	52.3	46.4	36.2	29.5
12.5°	67.4	65.5	63.2	61.3	59.5	57.8	56.2	54.1	45.8	33.4	26.2
15°	72.7	69.9	68.3	65.7	63.2	60.8	58.5	56.7	46.0	30.4	23.5
17.5°	78.7	75.9	72.5	69.7	66.9	63.9	61.1	57.4	44.8	28.1	21.4
20°	84.5	80.6	77.3	73.9	69.9	66.2	62.7	59.5	43.9	25.8	19.5
22.5°	90.8	86.2	82.0	77.6	72.7	68.5	64.3	60.2	42.3	23.7	17.9
25°	98.5	93.1	87.1	81.8	76.6	71.5	66.2	61.1	40.6	21.8	16.7
27.5°	107.8	100.8	94.8	88.0	80.8	74.3	68.5	62.9	39.0	20.4	15.6
30°	119.6	111.5	102.9	94.3	86.6	79.2	71.1	64.1	37.4	19.0	14.4
32.5°	135.4	125.2	114.7	104.7	94.5	85.0	76.4	67.4	36.5	17.9	13.2
35°	156.3	143.1	130.3	117.7	105.4	93.8	82.7	72.5	36.5	16.5	11.8
37.5°	176.0	160.7	144.5	128.9	114.3	100.8	87.6	75.2	34.6	15.3	10.7
40°	197.4	179.1	160.0	141.7	124.0	107.3	92.2	78.0	33.0	13.9	9.5
42.5°	230.2	206.9	182.1	160.7	139.6	118.9	100.1	83.4	30.9	12.5	8.4
45°	273.1	243.6	214.4	188.4	161.4	136.1	113.8	93.1	30.4	11.4	7.2
47.5°	319.1	284.3	249.9	216.7	185.1	155.6	128.9	104.0	30.4	10.2	6.3
50°	364.9	321.2	284.5	245.9	210.4	175.6	143.8	115.4	30.7	9.3	5.1
52.5°	406.2	359.5	318.4	273.8	234.6	194.2	159.6	126.6	30.2	8.1	4.2
55°	463.6	408.8	361.1	311.9	265.9	220.4	181.2	143.3	30.4	7.2	3.5
57.5°	569.2	504.9	447.5	383.0	330.0	271.3	223.7	177.7	33.2	6.0	2.6
60°	720.9	637.3	556.7	478.0	410.6	340.7	278.9	224.8	39.0	4.9	1.9
62.5°	822.8	713.5	617.3	530.4	452.2	379.0	311.7	250.1	43.0	3.9	1.2
63°	833.3	720.2	623.6	533.9	454.0	380.9	313.1	252.0	43.2	3.7	1.2
65°	853.0	731.8	627.1	534.6	452.2	378.3	312.1	251.8	43.7	3.0	0.9
67.5°	830.5	713.9	606.9	514.7	435.9	363.2	300.5	242.5	43.4	2.1	0.7
70°	742.7	646.1	552.0	466.1	394.6	328.9	273.6	221.1	39.9	1.4	0.5
72.5°	545.3	479.6	406.7	344.7	297.3	246.9	210.6	166.1	30.9	0.9	0.2
75°	161.6	147.2	123.8	109.2	96.4	79.7	70.8	55.3	15.8	0.5	0.0
77.5°	32.3	29.3	26.2	23.9	22.5	19.3	18.3	15.1	6.5	0.2	0.0
80°	17.0	13.9	11.8	10.5	9.1	7.4	6.3	5.1	1.2	0.0	0.0
82.5°	16.3	10.9	7.9	6.5	5.6	4.4	3.5	2.6	0.7	0.0	0.0
85°	6.0	4.6	3.5	2.8	2.3	2.1	1.6	1.4	0.0	0.0	0.0
87.5°	0.9	0.7	0.7	0.5	0.5	0.2	0.2	0.2	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P149353

CATALOG NUMBER: VWM-F01-LED-E1-SL2-HSS-8030

CANDELA DISTRIBUTION (continued):

	125°	135°	145°	155°	165°	175°	180°
0°	49.0	49.0	49.0	49.0	49.0	49.0	49.0
2.5°	41.6	39.7	38.8	37.6	37.6	37.4	37.9
5°	34.6	32.0	30.2	28.8	29.0	28.3	28.6
7.5°	29.3	26.7	25.1	24.2	23.9	23.7	23.7
10°	25.3	23.0	21.6	20.9	20.7	20.7	20.7
12.5°	22.5	20.2	19.0	18.6	18.6	18.3	18.3
15°	20.2	18.3	17.2	16.7	16.7	16.5	16.7
17.5°	18.3	16.5	15.6	15.1	15.1	14.9	14.9
20°	16.7	15.1	14.2	13.5	13.5	13.2	13.5
22.5°	15.3	13.7	12.5	12.1	11.8	11.6	11.8
25°	13.9	12.3	11.1	10.5	10.2	10.2	10.0
27.5°	12.8	11.1	9.8	9.1	8.8	8.8	8.6
30°	11.6	9.8	8.4	7.7	7.4	7.4	7.4
32.5°	10.5	8.4	7.2	6.5	6.3	6.3	6.3
35°	9.3	7.2	6.0	5.3	5.1	5.1	5.1
37.5°	7.9	6.0	4.6	4.2	3.9	3.7	3.7
40°	6.7	4.6	3.5	3.0	2.6	2.6	2.6
42.5°	5.6	3.7	2.6	1.9	1.6	1.4	1.6
45°	4.6	2.8	1.6	0.9	0.7	0.7	0.7
47.5°	3.7	1.9	0.7	0.2	0.2	0.2	0.2
50°	2.8	1.2	0.2	0.0	0.0	0.2	0.2
52.5°	2.1	0.7	0.0	0.0	0.0	0.0	0.0
55°	1.2	0.2	0.0	0.0	0.0	0.0	0.0
57.5°	0.7	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.5	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.2	0.0	0.0	0.0	0.0	0.0	0.0
63°	0.2	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.2	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)