

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: P149350

Luminaire Tested: **VWM-E01-LED-E1-SL2-HSS**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P149350
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-E01-LED-E1-SL2-HSS
Description: VISION WALL MEDIUM LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (21) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1833.6 lumens
Efficiency: N/A
Efficacy: 74.2 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

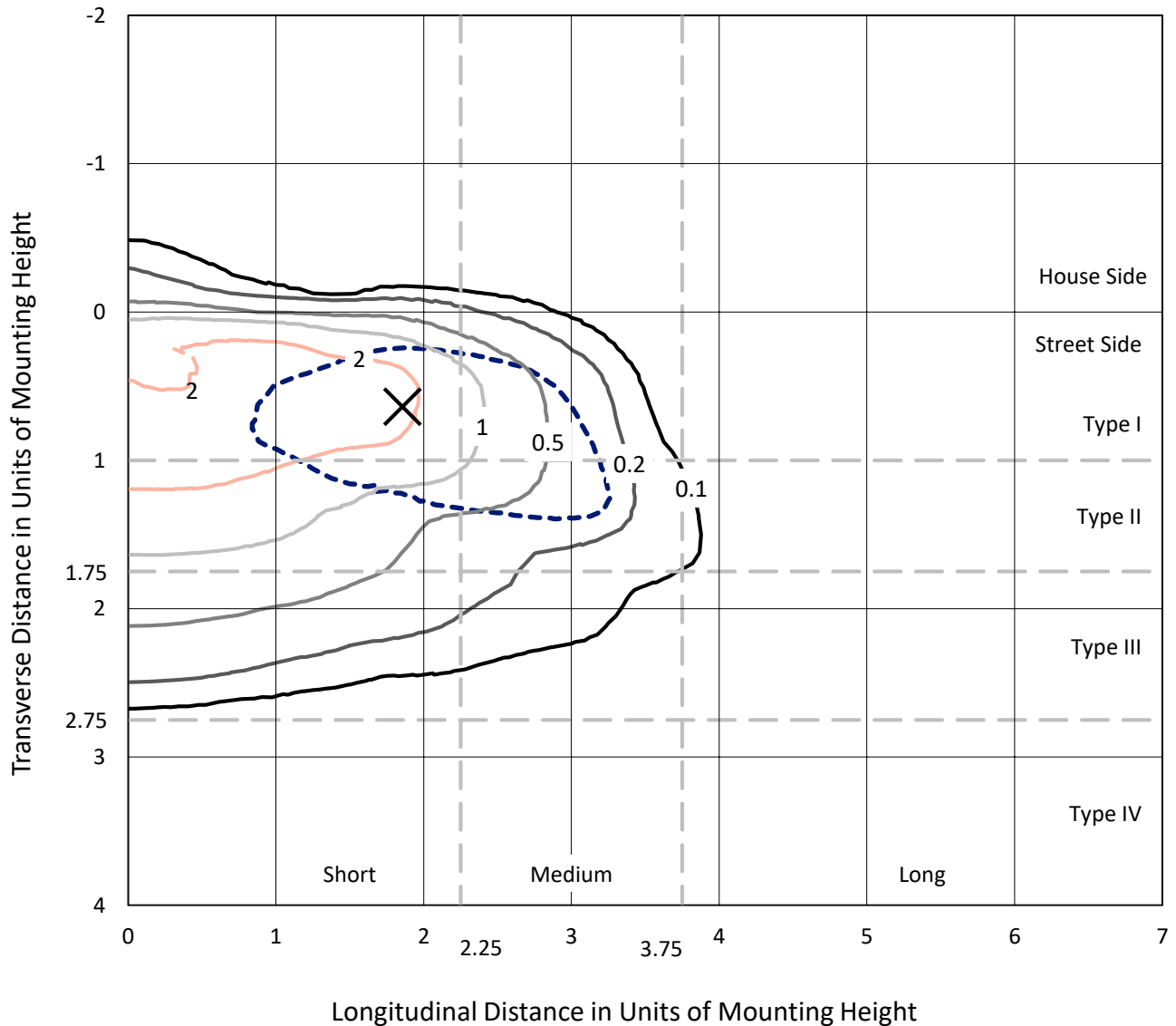
Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P149350
 CATALOG NUMBER: VWM-E01-LED-E1-SL2-HSS

Iso-Footcandle Lines of Horizontal Illumination

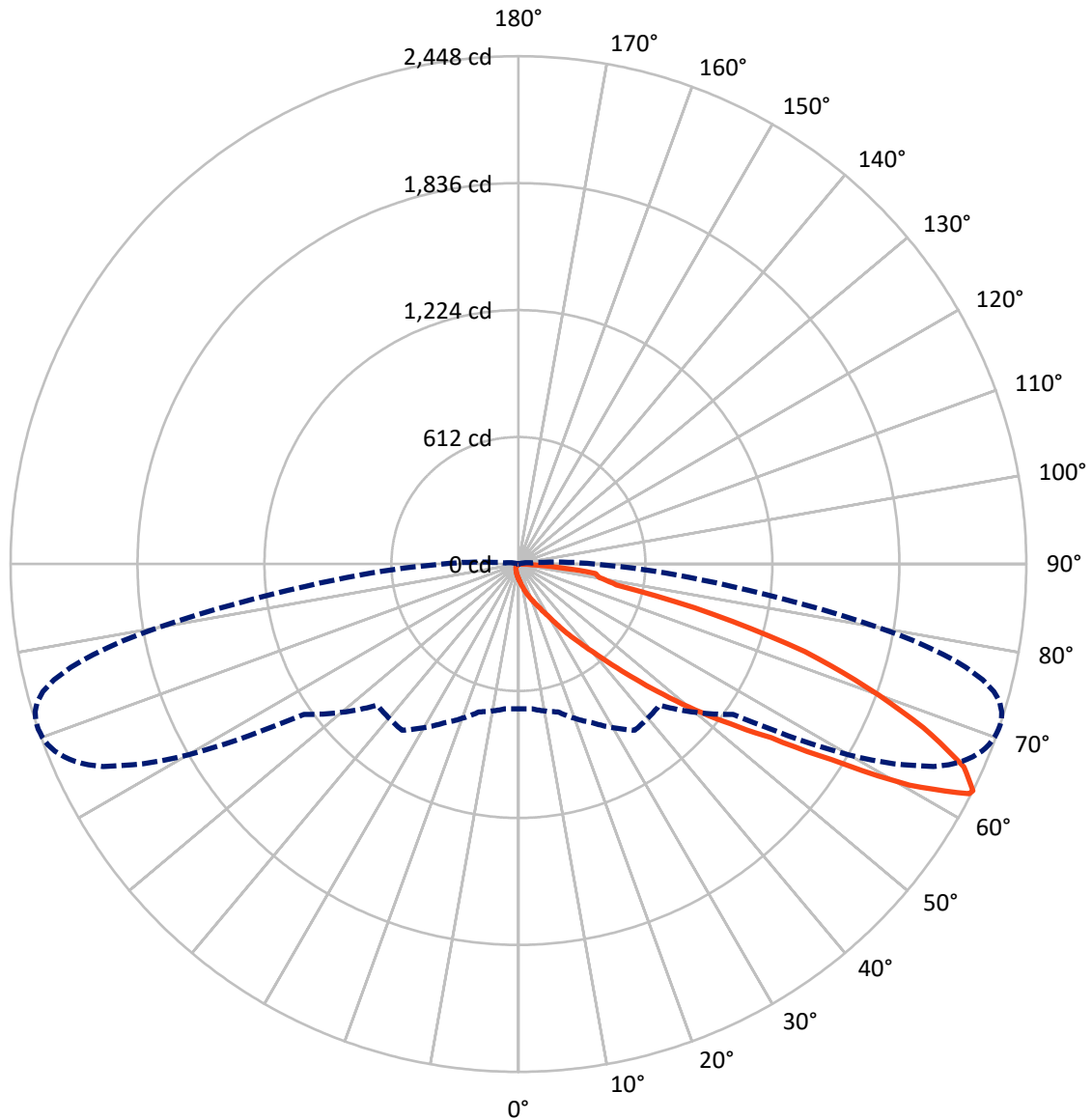
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.9 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P149350
CATALOG NUMBER: VWM-E01-LED-E1-SL2-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P149350

CATALOG NUMBER: VWM-E01-LED-E1-SL2-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	38.9	0.0	38.9
	% Fixture	2.1	0.0	2.1
Street Side	Lumens	1794.7	0.0	1794.7
	% Fixture	97.9	0.0	97.9
Total	Lumens	1833.6	0.0	1833.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.8	0.4
10°-20°	30.1	1.6
20°-30°	61.2	3.3
30°-40°	149.6	8.2
40°-50°	334.6	18.2
50°-60°	470.5	25.7
60°-70°	553.2	30.2
70°-80°	199.8	10.9
80°-90°	26.7	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°	1833.6	100.0
0°-180°	1833.6	100.0



REPORT NUMBER: P149350

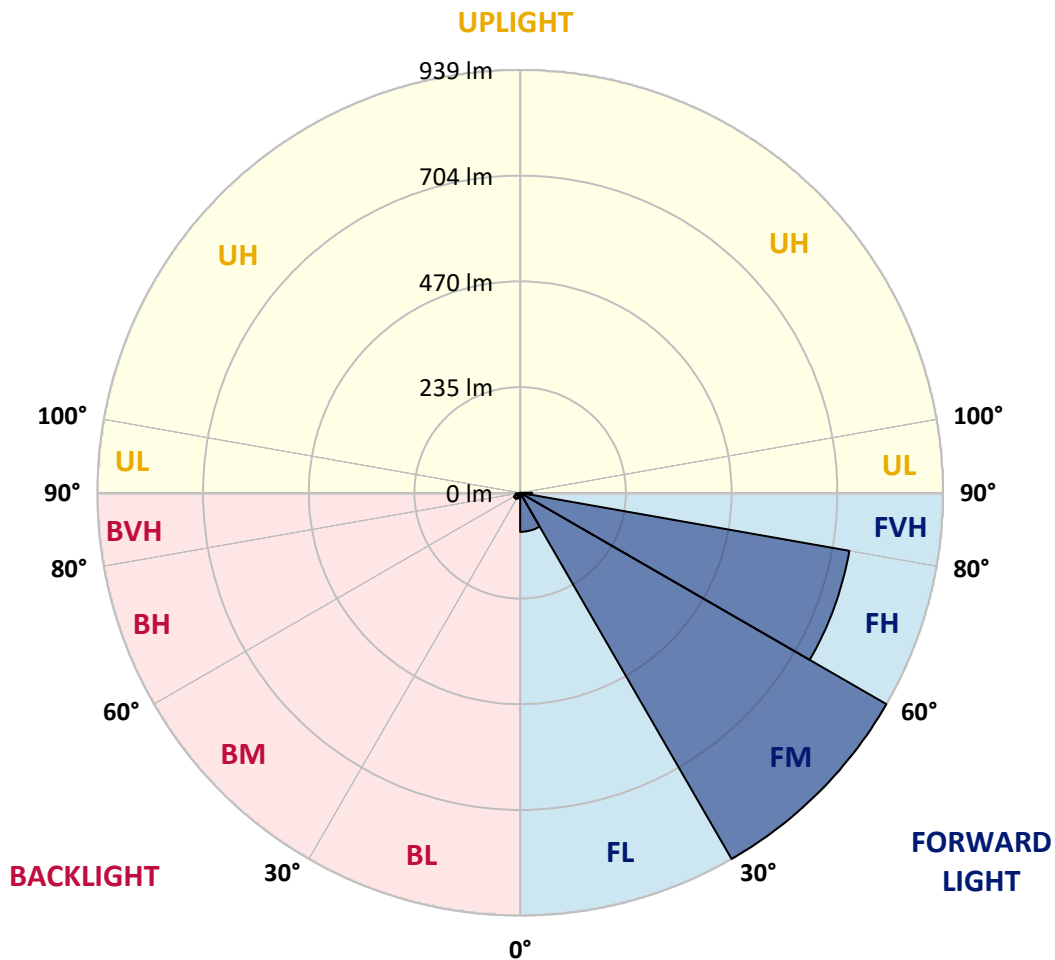
CATALOG NUMBER: VWM-E01-LED-E1-SL2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	86.6	4.7			
FM	(30°-60°)	939.0	51.2			
FH	(60°-80°)	742.3	40.5			G1/1800
FVH	(80°-90°)	26.7	1.5			G1/100
BL	(0°-30°)	12.5	0.7	B0/110		
BM	(30°-60°)	15.7	0.9	B0/220		
BH	(60°-80°)	10.7	0.6	B0/110		G0/110
BVH	(80°-90°)	0.1	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: P149350

CATALOG NUMBER: VWM-E01-LED-E1-SL2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
2.5°	92.0	93.0	92.3	90.7	88.7	86.0	83.7	83.7	83.3	82.3	82.7
5°	120.7	121.0	119.7	115.7	112.0	106.3	100.0	99.3	98.7	97.7	97.3
7.5°	148.7	150.0	148.7	144.3	137.0	128.3	118.3	117.3	115.3	115.3	114.0
10°	177.3	177.3	176.0	171.0	164.3	152.0	139.3	137.7	135.3	134.7	132.7
12.5°	197.7	197.7	197.0	194.3	189.0	178.0	162.7	161.0	158.0	157.0	154.7
15°	205.7	205.7	206.0	208.3	208.7	203.7	187.7	186.3	183.3	180.7	179.7
17.5°	210.7	210.3	210.3	213.7	219.7	223.0	212.7	211.3	208.0	206.7	203.3
20°	221.7	221.0	219.0	219.0	224.7	236.3	236.3	236.0	232.3	231.3	229.7
22.5°	238.0	237.3	231.3	226.3	229.0	243.7	257.3	256.7	255.3	254.0	253.0
25°	264.7	262.3	252.0	237.3	235.0	250.7	273.3	275.0	276.0	276.0	276.7
27.5°	305.0	302.0	283.7	256.3	246.0	262.0	291.0	294.3	297.3	298.0	301.0
30°	361.0	355.7	329.3	289.3	265.7	278.7	317.0	320.7	325.0	326.3	331.0
32.5°	453.0	450.0	424.7	364.7	314.0	311.3	353.3	358.0	363.7	366.0	371.7
35°	593.0	593.7	573.0	519.0	449.0	412.3	418.3	422.3	424.3	431.3	434.3
37.5°	688.0	689.7	694.3	673.0	623.0	585.7	538.7	543.0	532.7	533.7	534.0
40°	740.0	745.3	772.7	793.3	789.3	767.7	730.0	732.3	713.0	708.7	687.7
42.5°	774.7	781.7	825.3	889.3	922.0	941.7	933.0	932.0	917.0	911.3	893.7
45°	796.3	802.7	857.7	952.0	1027.3	1084.7	1108.3	1111.0	1098.3	1092.7	1078.0
47.5°	795.3	802.7	861.7	975.3	1086.3	1178.0	1244.7	1248.0	1255.7	1250.7	1251.7
50°	751.3	758.3	817.7	935.7	1069.0	1220.7	1342.7	1353.3	1365.7	1374.0	1378.0
52.5°	698.0	703.0	755.7	867.7	995.0	1203.0	1400.7	1419.0	1437.3	1453.0	1464.0
55°	678.3	684.0	725.3	818.3	935.7	1129.0	1427.7	1454.7	1480.7	1506.3	1527.3
57.5°	688.7	694.0	723.7	795.0	900.3	1051.0	1435.3	1477.3	1520.0	1561.7	1603.0
60°	726.7	732.3	757.7	816.7	891.0	1006.0	1405.3	1475.0	1546.0	1618.7	1687.0
62.5°	711.7	714.0	751.3	854.7	957.7	967.7	1296.3	1393.7	1502.0	1614.0	1724.3
63°	697.3	700.0	738.0	844.3	978.0	962.0	1262.7	1365.3	1479.7	1600.3	1720.3
65°	632.3	632.7	661.7	745.7	955.3	972.0	1112.7	1210.7	1342.0	1486.7	1638.3
67.5°	472.0	469.7	497.7	561.7	750.0	972.3	955.0	1010.0	1101.3	1229.7	1365.7
70°	167.3	163.7	209.0	297.7	467.3	795.3	820.7	824.3	849.7	919.0	1004.3
72.5°	54.3	55.3	66.7	109.0	215.3	535.3	743.0	731.7	725.0	724.7	736.0
75°	21.7	22.0	26.7	48.3	96.7	258.0	650.7	657.0	659.3	662.7	666.3
77.5°	10.3	11.3	15.0	27.0	48.0	127.7	465.7	519.3	550.0	573.7	588.0
80°	3.7	4.3	8.3	16.7	22.3	58.7	245.3	296.0	341.0	399.0	449.0
82.5°	0.0	0.0	1.7	11.7	12.3	23.7	100.7	118.0	135.0	175.0	224.7
85°	0.0	0.0	0.0	3.3	3.7	4.0	34.0	41.0	46.0	53.7	62.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.0	2.0	5.0	7.7
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: P149350

CATALOG NUMBER: VWM-E01-LED-E1-SL2-HSS

CANDELA DISTRIBUTION (continued):

	60°	61°	62°	64°	65°	66°	67°	68°	69°	70°	71°
0°	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
2.5°	82.0	81.7	81.7	81.0	80.7	80.0	79.7	78.7	78.3	78.3	78.3
5°	97.0	95.7	95.0	93.3	92.3	92.0	90.3	89.7	88.7	89.0	87.3
7.5°	113.7	111.3	110.3	108.0	107.3	105.0	104.3	102.7	101.7	99.7	99.0
10°	132.0	129.0	127.3	123.7	122.7	121.0	119.0	117.0	115.3	113.3	112.3
12.5°	153.0	150.3	149.0	144.0	141.7	139.3	136.7	134.0	131.3	129.7	127.3
15°	177.7	173.3	172.0	167.3	163.3	160.3	156.7	153.3	151.3	148.0	145.7
17.5°	202.0	197.7	196.7	189.7	185.3	183.3	179.3	175.0	171.3	168.0	164.3
20°	226.3	223.3	220.7	214.0	209.3	206.0	200.7	196.3	193.3	188.7	184.0
22.5°	250.7	247.7	245.7	238.7	234.3	229.7	225.0	220.3	216.0	210.3	205.0
25°	275.7	273.7	272.7	266.3	262.3	258.0	253.3	248.0	242.7	236.3	230.7
27.5°	301.7	302.3	300.3	299.0	294.7	291.7	284.3	280.7	276.7	269.0	262.0
30°	334.7	336.7	336.0	337.0	334.3	332.3	326.7	322.0	317.3	310.0	302.0
32.5°	376.3	379.0	380.3	384.0	382.7	382.0	380.3	373.7	370.3	357.7	354.3
35°	440.7	439.3	445.0	448.0	446.7	446.0	444.0	440.3	436.3	427.3	419.0
37.5°	524.3	525.7	527.7	521.7	517.7	517.3	511.3	507.7	502.0	492.0	482.0
40°	677.7	669.3	660.0	634.7	623.7	617.3	599.7	594.7	585.0	571.3	561.0
42.5°	877.0	868.7	840.7	798.3	775.7	744.3	730.0	712.3	698.7	676.3	664.3
45°	1075.0	1051.0	1047.7	998.3	970.3	929.0	903.3	873.7	842.7	813.3	792.0
47.5°	1242.0	1236.7	1220.3	1190.3	1164.3	1129.7	1096.7	1051.0	1019.0	977.3	939.0
50°	1375.7	1375.3	1369.3	1352.0	1330.3	1302.3	1273.3	1234.7	1198.3	1147.3	1106.3
52.5°	1475.7	1481.0	1483.0	1477.7	1469.3	1444.7	1430.0	1397.7	1367.0	1323.7	1279.3
55°	1549.0	1568.7	1578.7	1590.0	1587.7	1579.0	1578.3	1557.3	1543.3	1509.0	1477.7
57.5°	1639.7	1672.0	1703.0	1758.0	1760.0	1779.3	1789.3	1799.3	1802.0	1788.3	1778.0
60°	1755.0	1821.0	1879.7	1994.7	2024.7	2072.0	2102.7	2136.0	2164.3	2166.7	2166.0
62.5°	1836.3	1938.0	2032.7	2203.3	2261.7	2316.3	2357.3	2389.7	2409.3	2429.3	2438.7
63°	1838.7	1950.0	2050.7	2226.7	2288.0	2340.0	2379.0	2409.0	2429.7	2441.7	2447.7
65°	1782.3	1917.3	2037.3	2212.7	2270.3	2322.7	2343.0	2362.7	2372.7	2377.3	2359.7
67.5°	1510.7	1642.7	1782.7	1978.7	2028.0	2090.7	2107.3	2117.3	2122.0	2121.0	2106.0
70°	1129.7	1240.3	1396.0	1620.0	1685.3	1746.7	1784.7	1801.0	1806.3	1804.7	1782.3
72.5°	788.7	853.7	982.0	1231.3	1320.3	1399.0	1446.0	1470.3	1475.3	1465.3	1444.7
75°	662.3	665.7	694.7	831.0	914.3	998.3	1051.3	1066.7	1056.7	1026.3	973.7
77.5°	591.3	598.7	598.7	619.0	635.3	658.7	663.7	626.3	583.0	527.0	481.7
80°	496.0	521.7	539.7	554.7	556.3	551.7	539.3	518.3	485.0	442.3	395.0
82.5°	301.3	352.0	372.7	450.0	488.0	513.7	511.7	483.7	458.3	414.0	373.7
85°	76.0	82.0	89.0	115.7	129.7	158.3	176.3	184.7	187.7	172.3	156.0
87.5°	7.3	5.0	8.3	6.3	9.0	6.7	9.0	8.3	10.3	11.0	12.0
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: P149350

CATALOG NUMBER: VWM-E01-LED-E1-SL2-HSS

CANDELA DISTRIBUTION (continued):

	72°	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°
0°	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
2.5°	77.7	77.3	77.0	76.7	76.3	76.0	75.3	75.3	74.7	74.3	74.0
5°	86.3	85.7	85.3	84.7	83.7	83.0	82.0	80.7	79.7	79.3	78.7
7.5°	97.3	95.7	95.0	94.0	92.7	90.7	89.3	88.3	86.7	85.7	83.7
10°	109.7	108.0	106.0	104.0	102.0	99.7	98.0	96.7	94.0	92.7	90.3
12.5°	125.3	122.3	120.0	117.3	114.7	112.0	110.0	106.0	103.7	100.7	98.7
15°	141.3	138.7	136.0	132.7	128.7	124.3	122.3	118.7	115.7	111.0	108.3
17.5°	160.7	155.7	151.7	147.7	144.0	140.0	136.0	130.3	126.0	122.0	116.7
20°	179.7	173.7	169.3	164.0	158.7	152.3	147.7	143.7	137.7	132.3	126.7
22.5°	200.0	194.0	187.0	181.7	174.3	169.3	163.0	156.3	150.3	143.3	136.3
25°	224.7	218.3	210.3	203.3	195.0	188.0	180.3	172.7	165.3	157.3	148.3
27.5°	255.0	248.3	239.7	231.3	220.3	211.7	204.3	194.0	184.7	174.7	164.3
30°	293.3	286.0	275.3	263.3	252.3	242.7	232.3	218.7	208.3	196.3	183.0
32.5°	343.3	334.7	320.3	309.0	295.3	282.7	268.3	254.7	240.0	224.3	209.0
35°	406.3	398.3	381.7	365.0	350.0	335.0	317.0	301.3	280.7	261.7	242.0
37.5°	471.7	457.3	442.0	424.0	405.3	387.3	365.3	343.7	320.0	299.3	274.7
40°	546.3	529.0	516.3	497.0	470.7	445.0	424.7	397.7	368.0	340.3	311.3
42.5°	648.7	629.3	606.7	577.3	558.3	528.3	502.0	470.0	431.0	400.0	365.0
45°	767.0	740.7	718.7	690.3	667.3	630.0	599.3	556.7	517.7	477.0	434.3
47.5°	902.0	869.3	837.3	809.3	772.7	736.0	697.0	651.7	601.7	557.0	506.3
50°	1057.0	1010.7	966.3	930.3	880.0	837.7	795.3	744.3	689.0	637.7	580.0
52.5°	1229.3	1175.7	1117.0	1061.7	1003.3	949.0	898.0	839.3	777.7	715.0	650.7
55°	1437.3	1397.0	1328.0	1257.7	1179.7	1107.0	1041.3	968.7	893.7	811.3	743.7
57.5°	1763.0	1743.3	1685.7	1615.3	1513.7	1425.3	1314.0	1225.0	1116.3	1003.0	915.7
60°	2204.3	2180.0	2147.7	2090.7	2010.0	1890.0	1767.3	1629.0	1463.7	1306.7	1157.7
62.5°	2439.7	2431.0	2404.7	2365.3	2290.0	2195.3	2071.7	1919.7	1733.0	1542.3	1352.3
63°	2446.7	2435.7	2413.0	2373.0	2306.7	2215.0	2093.7	1946.0	1763.3	1569.0	1375.0
65°	2352.0	2347.7	2324.7	2281.0	2235.7	2165.7	2071.7	1944.7	1791.3	1607.7	1414.7
67.5°	2086.0	2073.0	2037.7	2024.3	1992.7	1944.0	1872.3	1785.0	1675.3	1531.0	1364.3
70°	1764.3	1745.0	1700.7	1677.0	1638.3	1607.7	1564.0	1501.7	1434.0	1333.3	1209.0
72.5°	1423.3	1383.3	1342.7	1281.0	1227.0	1172.3	1124.0	1080.0	1005.7	965.0	870.7
75°	924.3	851.7	782.0	688.7	604.7	530.3	458.0	421.3	345.0	314.0	269.7
77.5°	438.7	398.0	343.3	301.0	247.0	201.7	164.7	123.7	97.0	76.0	58.0
80°	354.0	319.7	286.7	248.3	207.7	165.7	127.0	95.0	67.3	46.7	33.0
82.5°	315.7	278.3	237.7	211.3	183.7	150.3	123.3	100.7	74.3	54.3	37.0
85°	122.7	103.3	79.7	65.0	50.7	41.7	37.7	26.0	20.3	16.0	12.3
87.5°	10.7	8.7	7.0	4.7	5.0	2.7	3.0	2.0	1.7	1.7	1.3
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: P149350

CATALOG NUMBER: VWM-E01-LED-E1-SL2-HSS

CANDELA DISTRIBUTION (continued):

	83°	84°	85°	86°	87°	88°	89°	90°	95°	105°	115°
0°	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
2.5°	73.7	73.3	73.0	72.3	72.3	71.7	71.3	71.0	69.3	65.7	62.7
5°	77.3	76.7	76.0	75.0	74.3	73.3	72.7	71.7	68.0	61.0	55.0
7.5°	82.7	81.3	80.3	78.3	77.3	76.0	75.0	73.3	67.3	56.7	48.3
10°	89.0	86.7	85.0	82.7	80.7	79.0	77.3	75.0	66.7	52.0	42.3
12.5°	96.7	94.0	90.7	88.0	85.3	83.0	80.7	77.7	65.7	48.0	37.7
15°	104.3	100.3	98.0	94.3	90.7	87.3	84.0	81.3	66.0	43.7	33.7
17.5°	113.0	109.0	104.0	100.0	96.0	91.7	87.7	82.3	64.3	40.3	30.7
20°	121.3	115.7	111.0	106.0	100.3	95.0	90.0	85.3	63.0	37.0	28.0
22.5°	130.3	123.7	117.7	111.3	104.3	98.3	92.3	86.3	60.7	34.0	25.7
25°	141.3	133.7	125.0	117.3	110.0	102.7	95.0	87.7	58.3	31.3	24.0
27.5°	154.7	144.7	136.0	126.3	116.0	106.7	98.3	90.3	56.0	29.3	22.3
30°	171.7	160.0	147.7	135.3	124.3	113.7	102.0	92.0	53.7	27.3	20.7
32.5°	194.3	179.7	164.7	150.3	135.7	122.0	109.7	96.7	52.3	25.7	19.0
35°	224.3	205.3	187.0	169.0	151.3	134.7	118.7	104.0	52.3	23.7	17.0
37.5°	252.7	230.7	207.3	185.0	164.0	144.7	125.7	108.0	49.7	22.0	15.3
40°	283.3	257.0	229.7	203.3	178.0	154.0	132.3	112.0	47.3	20.0	13.7
42.5°	330.3	297.0	261.3	230.7	200.3	170.7	143.7	119.7	44.3	18.0	12.0
45°	392.0	349.7	307.7	270.3	231.7	195.3	163.3	133.7	43.7	16.3	10.3
47.5°	458.0	408.0	358.7	311.0	265.7	223.3	185.0	149.3	43.7	14.7	9.0
50°	523.7	461.0	408.3	353.0	302.0	252.0	206.3	165.7	44.0	13.3	7.3
52.5°	583.0	516.0	457.0	393.0	336.7	278.7	229.0	181.7	43.3	11.7	6.0
55°	665.3	586.7	518.3	447.7	381.7	316.3	260.0	205.7	43.7	10.3	5.0
57.5°	817.0	724.7	642.3	549.7	473.7	389.3	321.0	255.0	47.7	8.7	3.7
60°	1034.7	914.7	799.0	686.0	589.3	489.0	400.3	322.7	56.0	7.0	2.7
62.5°	1181.0	1024.0	886.0	761.3	649.0	544.0	447.3	359.0	61.7	5.7	1.7
63°	1196.0	1033.7	895.0	766.3	651.7	546.7	449.3	361.7	62.0	5.3	1.7
65°	1224.3	1050.3	900.0	767.3	649.0	543.0	448.0	361.3	62.7	4.3	1.3
67.5°	1192.0	1024.7	871.0	738.7	625.7	521.3	431.3	348.0	62.3	3.0	1.0
70°	1066.0	927.3	792.3	669.0	566.3	472.0	392.7	317.3	57.3	2.0	0.7
72.5°	782.7	688.3	583.7	494.7	426.7	354.3	302.3	238.3	44.3	1.3	0.3
75°	232.0	211.3	177.7	156.7	138.3	114.3	101.7	79.3	22.7	0.7	0.0
77.5°	46.3	42.0	37.7	34.3	32.3	27.7	26.3	21.7	9.3	0.3	0.0
80°	24.3	20.0	17.0	15.0	13.0	10.7	9.0	7.3	1.7	0.0	0.0
82.5°	23.3	15.7	11.3	9.3	8.0	6.3	5.0	3.7	1.0	0.0	0.0
85°	8.7	6.7	5.0	4.0	3.3	3.0	2.3	2.0	0.0	0.0	0.0
87.5°	1.3	1.0	1.0	0.7	0.7	0.3	0.3	0.3	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: P149350

CATALOG NUMBER: VWM-E01-LED-E1-SL2-HSS

CANDELA DISTRIBUTION (continued):

	125°	135°	145°	155°	165°	175°	180°
0°	70.3	70.3	70.3	70.3	70.3	70.3	70.3
2.5°	59.7	57.0	55.7	54.0	54.0	53.7	54.3
5°	49.7	46.0	43.3	41.3	41.7	40.7	41.0
7.5°	42.0	38.3	36.0	34.7	34.3	34.0	34.0
10°	36.3	33.0	31.0	30.0	29.7	29.7	29.7
12.5°	32.3	29.0	27.3	26.7	26.7	26.3	26.3
15°	29.0	26.3	24.7	24.0	24.0	23.7	24.0
17.5°	26.3	23.7	22.3	21.7	21.7	21.3	21.3
20°	24.0	21.7	20.3	19.3	19.3	19.0	19.3
22.5°	22.0	19.7	18.0	17.3	17.0	16.7	17.0
25°	20.0	17.7	16.0	15.0	14.7	14.7	14.3
27.5°	18.3	16.0	14.0	13.0	12.7	12.7	12.3
30°	16.7	14.0	12.0	11.0	10.7	10.7	10.7
32.5°	15.0	12.0	10.3	9.3	9.0	9.0	9.0
35°	13.3	10.3	8.7	7.7	7.3	7.3	7.3
37.5°	11.3	8.7	6.7	6.0	5.7	5.3	5.3
40°	9.7	6.7	5.0	4.3	3.7	3.7	3.7
42.5°	8.0	5.3	3.7	2.7	2.3	2.0	2.3
45°	6.7	4.0	2.3	1.3	1.0	1.0	1.0
47.5°	5.3	2.7	1.0	0.3	0.3	0.3	0.3
50°	4.0	1.7	0.3	0.0	0.0	0.3	0.3
52.5°	3.0	1.0	0.0	0.0	0.0	0.0	0.0
55°	1.7	0.3	0.0	0.0	0.0	0.0	0.0
57.5°	1.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.7	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.3	0.0	0.0	0.0	0.0	0.0	0.0
63°	0.3	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.3	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)