

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: P149288

Luminaire Tested: **VXS-E01-LED-E1-SL2-HSS-8030**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P149288  
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: VXS-E01-LED-E1-SL2-HSS-8030  
Description: VISION SITE SMALL LED LUMINAIRE  
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD  
Light Source: (21) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1547.5 lumens  
Efficiency: N/A  
Efficacy: 62.7 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

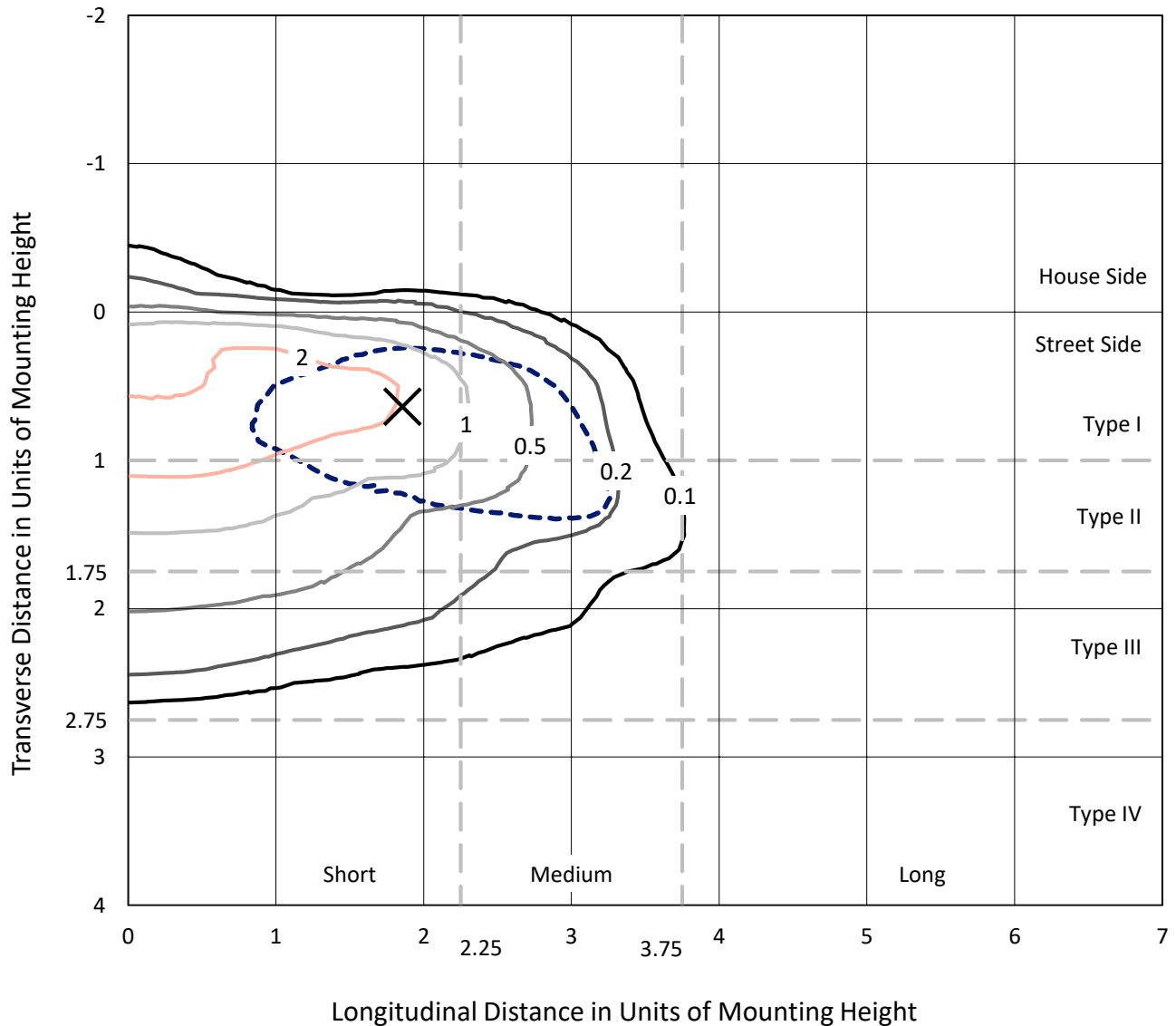


REPORT NUMBER: P149288

CATALOG NUMBER: VXS-E01-LED-E1-SL2-HSS-8030

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

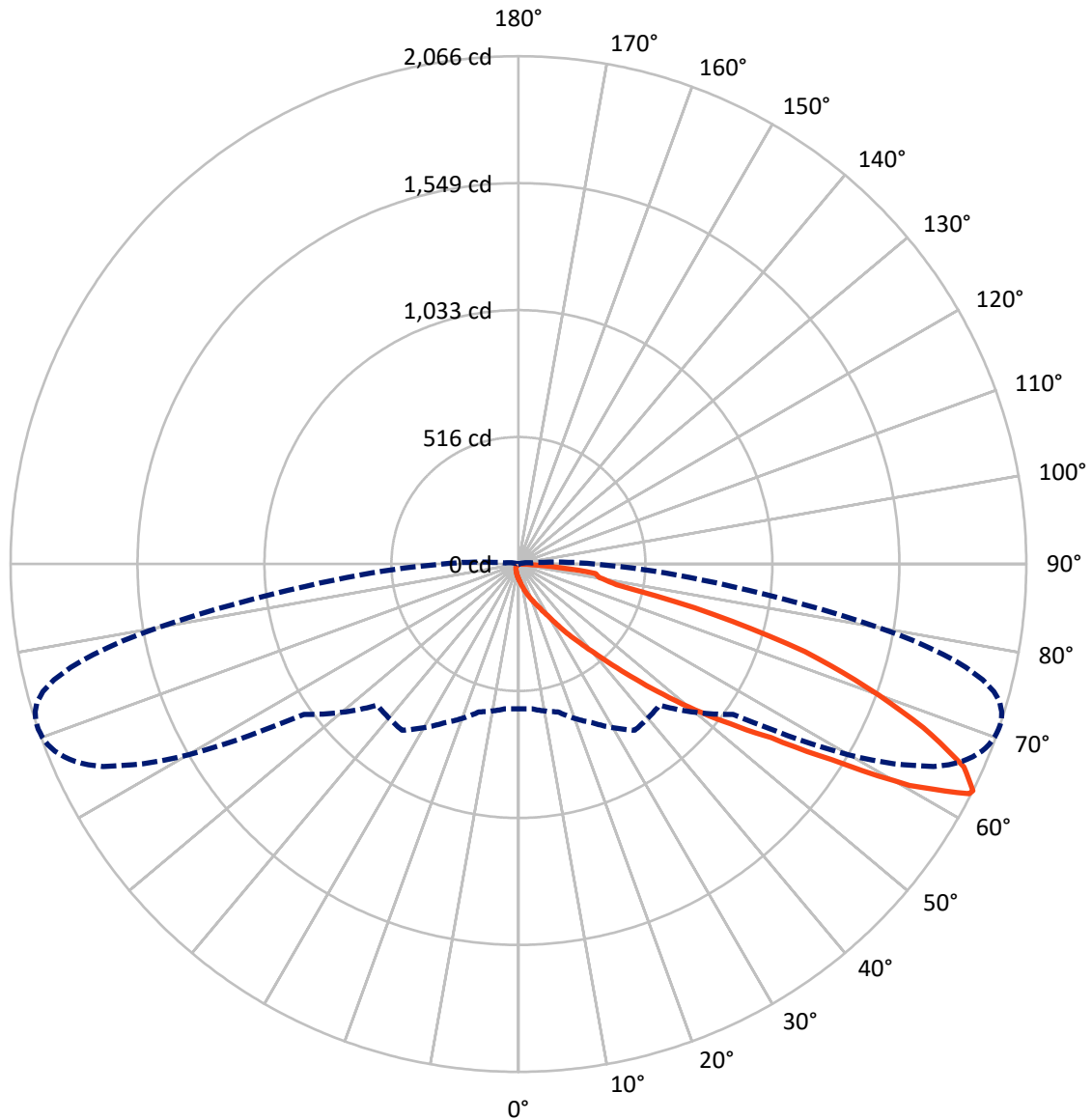


Based on 10 foot mounting height. Maximum calculated value = 3.3 fc  
 Type II - Short - Non-Cutoff

REPORT NUMBER: P149288

CATALOG NUMBER: VXS-E01-LED-E1-SL2-HSS-8030

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P149288

CATALOG NUMBER: VXS-E01-LED-E1-SL2-HSS-8030

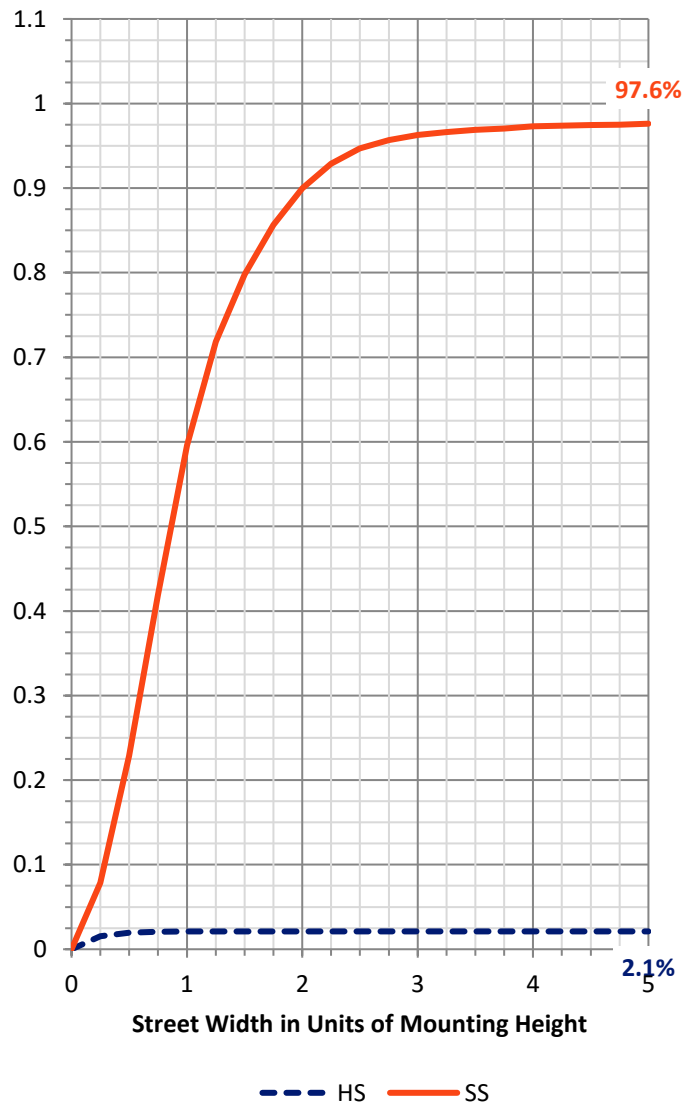
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	32.9	0.0	32.9
	% Fixture	2.1	0.0	2.1
<b>Street Side</b>	Lumens	1514.7	0.0	1514.7
	% Fixture	97.9	0.0	97.9
<b>Total</b>	Lumens	1547.5	0.0	1547.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	6.6	0.4
10°-20°	25.4	1.6
20°-30°	51.7	3.3
30°-40°	126.3	8.2
40°-50°	282.4	18.2
50°-60°	397.1	25.7
60°-70°	466.9	30.2
70°-80°	168.6	10.9
80°-90°	22.5	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°	1547.5	100.0
0°-180°	1547.5	100.0

**Coefficient of Utilization**



REPORT NUMBER: P149288

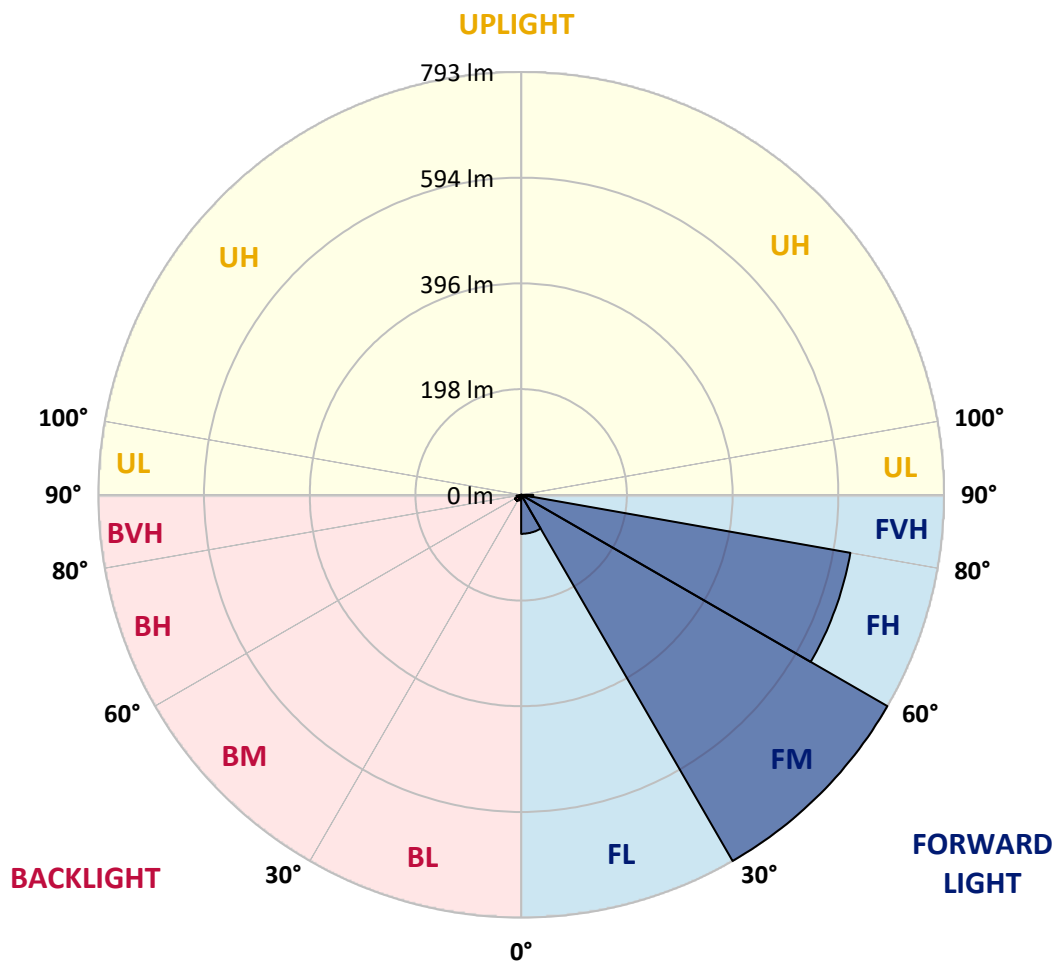
CATALOG NUMBER: VXS-E01-LED-E1-SL2-HSS-8030

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	73.1	4.7			
FM	(30°-60°)	792.5	51.2			
FH	(60°-80°)	626.5	40.5			G0/660
FVH	(80°-90°)	22.5	1.5			G1/100
BL	(0°-30°)	10.6	0.7	B0/110		
BM	(30°-60°)	13.2	0.9	B0/220		
BH	(60°-80°)	9.0	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: P149288

CATALOG NUMBER: VXS-E01-LED-E1-SL2-HSS-8030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
2.5°	77.6	78.4	77.9	76.5	74.8	72.5	70.6	70.6	70.4	69.5	69.7
5°	101.9	102.1	101.0	97.6	94.5	89.7	84.4	83.8	83.3	82.4	82.2
7.5°	125.5	126.6	125.5	121.9	115.6	108.3	99.9	99.1	97.3	97.3	96.2
10°	149.6	149.6	148.5	144.4	138.7	128.3	117.6	116.2	114.2	113.7	112.0
12.5°	166.8	166.8	166.2	164.0	159.5	150.3	137.3	135.9	133.4	132.5	130.6
15°	173.6	173.6	173.9	175.9	176.1	171.9	158.3	157.3	154.7	152.4	151.6
17.5°	177.8	177.5	177.5	180.3	185.4	188.2	179.5	178.3	175.5	174.4	171.6
20°	187.0	186.5	184.9	184.9	189.6	199.5	199.5	199.2	196.1	195.2	193.9
22.5°	200.8	200.3	195.2	191.0	193.3	205.7	217.2	216.6	215.5	214.4	213.6
25°	223.4	221.5	212.6	200.3	198.3	211.6	230.7	232.1	233.0	233.0	233.5
27.5°	257.4	254.9	239.4	216.4	207.7	221.1	245.6	248.4	251.0	251.5	254.0
30°	304.7	300.2	277.9	244.1	224.2	235.2	267.6	270.7	274.3	275.4	279.4
32.5°	382.3	379.8	358.4	307.8	265.0	262.8	298.2	302.2	306.9	308.9	313.7
35°	500.5	501.0	483.6	438.0	379.0	348.0	353.1	356.5	358.1	364.0	366.5
37.5°	580.6	582.1	586.0	568.0	525.8	494.3	454.6	458.2	449.5	450.4	450.7
40°	624.6	629.0	652.1	669.5	666.2	647.9	616.1	618.0	601.8	598.1	580.4
42.5°	653.8	659.7	696.6	750.6	778.1	794.7	787.5	786.6	774.0	769.1	754.2
45°	672.1	677.4	723.8	803.5	867.0	915.4	935.4	937.7	926.9	922.2	909.8
47.5°	671.3	677.4	727.3	823.2	916.9	994.2	1050.5	1053.3	1059.8	1055.5	1056.4
50°	634.1	640.0	690.1	789.7	902.2	1030.3	1133.2	1142.2	1152.6	1159.7	1163.0
52.5°	589.1	593.4	637.8	732.3	839.8	1015.3	1182.2	1197.6	1213.1	1226.3	1235.6
55°	572.5	577.3	612.1	690.7	789.7	952.8	1205.0	1227.8	1249.6	1271.3	1289.0
57.5°	581.2	585.7	610.8	671.0	759.9	887.0	1211.4	1246.8	1282.9	1318.0	1353.0
60°	613.3	618.0	639.5	689.2	752.0	849.0	1186.1	1244.9	1304.8	1366.1	1423.8
62.5°	600.6	602.6	634.1	721.3	808.3	816.7	1094.1	1176.3	1267.7	1362.2	1455.3
63°	588.5	590.8	622.9	712.6	825.4	811.9	1065.7	1152.3	1248.8	1350.7	1451.9
65°	533.7	534.0	558.4	629.3	806.3	820.3	939.1	1021.8	1132.6	1254.7	1382.7
67.5°	398.3	396.4	420.0	474.1	633.0	820.6	806.0	852.4	929.5	1037.8	1152.6
70°	141.2	138.1	176.4	251.2	394.4	671.3	692.6	695.8	717.1	775.6	847.7
72.5°	45.9	46.7	56.3	92.0	181.8	451.8	627.0	617.5	611.9	611.6	621.1
75°	18.2	18.5	22.5	40.8	81.6	217.7	549.1	554.5	556.5	559.3	562.4
77.5°	8.7	9.5	12.6	22.8	40.5	107.8	393.1	438.3	464.1	484.1	496.3
80°	3.1	3.6	7.0	14.1	18.9	49.5	207.0	249.8	287.8	336.8	379.0
82.5°	0.0	0.0	1.5	9.8	10.4	20.0	85.0	99.6	114.0	147.7	189.6
85°	0.0	0.0	0.0	2.8	3.1	3.4	28.7	34.6	38.9	45.3	52.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.7	4.2	6.4
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: P149288

CATALOG NUMBER: VXS-E01-LED-E1-SL2-HSS-8030

**CANDELA DISTRIBUTION (continued):**

	60°	61°	62°	64°	65°	66°	67°	68°	69°	70°	71°
0°	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
2.5°	69.2	68.9	68.9	68.4	68.1	67.6	67.3	66.4	66.1	66.1	66.1
5°	81.9	80.7	80.2	78.8	77.9	77.6	76.3	75.6	74.8	75.1	73.7
7.5°	96.0	94.0	93.2	91.2	90.6	88.6	88.1	86.6	85.8	84.1	83.5
10°	111.4	108.9	107.5	104.4	103.5	102.1	100.4	98.8	97.3	95.6	94.8
12.5°	129.1	126.8	125.8	121.6	119.6	117.6	115.3	113.1	110.9	109.4	107.5
15°	149.9	146.3	145.2	141.2	137.8	135.3	132.2	129.4	127.8	124.9	122.9
17.5°	170.5	166.8	166.0	160.1	156.4	154.7	151.4	147.7	144.6	141.8	138.7
20°	191.0	188.5	186.2	180.6	176.7	173.9	169.3	165.7	163.2	159.3	155.3
22.5°	211.6	209.0	207.4	201.5	197.8	193.9	189.9	186.0	182.3	177.5	173.1
25°	232.6	231.0	230.2	224.8	221.5	217.7	213.8	209.3	204.8	199.5	194.7
27.5°	254.6	255.1	253.5	252.3	248.7	246.1	240.0	236.9	233.5	227.0	221.1
30°	282.5	284.1	283.6	284.5	282.2	280.5	275.8	271.8	267.9	261.7	254.9
32.5°	317.6	319.9	321.0	324.0	323.0	322.4	321.0	315.3	312.5	301.9	299.1
35°	371.9	370.8	375.5	378.1	377.0	376.4	374.7	371.6	368.3	360.6	353.7
37.5°	442.5	443.6	445.4	440.3	436.9	436.6	431.6	428.5	423.7	415.2	406.8
40°	571.9	564.9	557.0	535.6	526.3	521.0	506.1	501.9	493.8	482.2	473.5
42.5°	740.2	733.2	709.5	673.8	654.6	628.2	616.1	601.2	589.6	570.8	560.7
45°	907.3	887.0	884.2	842.6	819.0	784.0	762.4	737.4	711.2	686.4	668.4
47.5°	1048.2	1043.7	1029.9	1004.7	982.7	953.5	925.6	887.0	860.0	824.9	792.5
50°	1161.0	1160.7	1155.8	1141.0	1122.8	1099.2	1074.7	1042.1	1011.4	968.3	933.8
52.5°	1245.5	1249.9	1251.6	1247.2	1240.1	1219.3	1206.9	1179.6	1153.8	1117.2	1079.8
55°	1307.4	1323.9	1332.3	1342.0	1340.0	1332.6	1332.1	1314.4	1302.6	1273.6	1247.2
57.5°	1383.8	1411.2	1437.3	1483.7	1485.4	1501.8	1510.2	1518.7	1520.8	1509.3	1500.6
60°	1481.2	1536.9	1586.4	1683.5	1708.8	1748.7	1774.6	1802.8	1826.6	1828.6	1828.1
62.5°	1549.8	1635.6	1715.5	1859.6	1908.8	1954.9	1989.5	2016.9	2033.5	2050.4	2058.2
63°	1551.8	1645.8	1730.8	1879.3	1931.1	1974.9	2007.9	2033.2	2050.6	2060.7	2065.8
65°	1504.2	1618.2	1719.5	1867.5	1916.2	1960.3	1977.5	1994.1	2002.5	2006.4	1991.5
67.5°	1275.0	1386.4	1504.6	1669.9	1711.6	1764.5	1778.5	1787.0	1791.0	1790.2	1777.4
70°	953.5	1046.8	1178.2	1367.3	1422.4	1474.2	1506.2	1520.0	1524.6	1523.1	1504.2
72.5°	665.6	720.5	828.8	1039.3	1114.3	1180.7	1220.4	1240.9	1245.2	1236.7	1219.3
75°	559.0	561.9	586.3	701.3	771.7	842.6	887.4	900.2	891.8	866.2	821.8
77.5°	499.1	505.3	505.3	522.4	536.2	556.0	560.1	528.6	492.0	444.8	406.5
80°	418.7	440.3	455.4	468.1	469.5	465.6	455.2	437.5	409.3	373.4	333.4
82.5°	254.3	297.1	314.5	379.8	411.9	433.6	431.8	408.2	386.8	349.4	315.3
85°	64.1	69.2	75.1	97.6	109.4	133.7	148.8	155.9	158.3	145.5	131.7
87.5°	6.2	4.2	7.0	5.4	7.6	5.6	7.6	7.0	8.7	9.3	10.2
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: P149288

CATALOG NUMBER: VXS-E01-LED-E1-SL2-HSS-8030

**CANDELA DISTRIBUTION (continued):**

	72°	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°
0°	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
2.5°	65.6	65.3	65.0	64.7	64.5	64.1	63.6	63.6	63.0	62.7	62.5
5°	72.8	72.3	72.0	71.5	70.6	70.1	69.2	68.1	67.3	66.9	66.4
7.5°	82.2	80.7	80.2	79.4	78.2	76.5	75.4	74.5	73.2	72.3	70.6
10°	92.5	91.2	89.4	87.8	86.1	84.1	82.7	81.6	79.4	78.2	76.3
12.5°	105.8	103.2	101.2	99.1	96.8	94.5	92.8	89.4	87.5	85.0	83.3
15°	119.3	117.0	114.8	112.0	108.6	105.0	103.2	100.1	97.6	93.7	91.4
17.5°	135.6	131.4	128.0	124.7	121.6	118.1	114.8	110.1	106.3	103.0	98.4
20°	151.6	146.5	142.9	138.4	133.9	128.6	124.7	121.2	116.2	111.7	106.9
22.5°	168.8	163.7	157.8	153.4	147.2	142.9	137.6	131.9	126.8	120.9	115.0
25°	189.6	184.2	177.5	171.6	164.6	158.7	152.2	145.7	139.6	132.7	125.2
27.5°	215.2	209.6	202.3	195.2	186.0	178.7	172.4	163.7	155.9	147.5	138.7
30°	247.6	241.3	232.3	222.3	213.0	204.8	196.1	184.6	175.9	165.7	154.4
32.5°	289.7	282.5	270.4	260.8	249.2	238.5	226.4	214.9	202.6	189.3	176.4
35°	342.9	336.2	322.1	308.1	295.4	282.7	267.6	254.3	236.9	220.8	204.2
37.5°	398.0	386.0	373.1	357.8	342.1	326.9	308.3	290.1	270.1	252.6	231.8
40°	461.1	446.4	435.8	419.5	397.2	375.5	358.4	335.6	310.6	287.3	262.8
42.5°	547.5	531.2	512.0	487.3	471.2	445.9	423.7	396.7	363.7	337.6	308.1
45°	647.4	625.1	606.5	582.6	563.2	531.7	505.8	469.8	436.9	402.6	366.5
47.5°	761.2	733.7	706.7	683.1	652.1	621.1	588.3	550.1	507.8	470.1	427.4
50°	892.1	853.0	815.5	785.2	742.7	706.9	671.3	628.2	581.6	538.1	489.5
52.5°	1037.5	992.2	942.7	896.1	846.8	800.9	757.9	708.4	656.4	603.4	549.1
55°	1213.1	1179.1	1120.8	1061.5	995.6	934.3	878.9	817.5	754.2	684.8	627.7
57.5°	1488.0	1471.4	1422.7	1363.3	1277.5	1203.0	1109.0	1033.9	942.2	846.5	772.8
60°	1860.4	1839.9	1812.6	1764.5	1696.4	1595.1	1491.6	1374.8	1235.3	1102.8	977.1
62.5°	2059.1	2051.7	2029.5	1996.3	1932.7	1852.8	1748.5	1620.2	1462.6	1301.8	1141.3
63°	2065.0	2055.6	2036.6	2002.8	1946.8	1869.4	1767.0	1642.4	1488.2	1324.2	1160.5
65°	1985.1	1981.5	1962.0	1925.2	1886.8	1827.8	1748.5	1641.2	1511.9	1356.9	1194.0
67.5°	1760.5	1749.6	1719.8	1708.5	1681.8	1640.7	1580.2	1506.5	1414.0	1292.1	1151.5
70°	1489.1	1472.7	1435.3	1415.3	1382.7	1356.9	1320.0	1267.4	1210.3	1125.3	1020.4
72.5°	1201.2	1167.6	1133.2	1081.1	1035.5	989.4	948.6	911.5	848.8	814.4	734.8
75°	780.1	718.8	660.0	581.2	510.4	447.6	386.5	355.6	291.2	265.0	227.6
77.5°	370.3	336.0	289.7	254.0	208.5	170.2	139.0	104.4	81.9	64.1	48.9
80°	298.8	269.8	242.0	209.6	175.2	139.8	107.2	80.2	56.8	39.4	27.9
82.5°	266.4	234.9	200.6	178.3	155.0	126.8	104.0	85.0	62.7	45.9	31.2
85°	103.5	87.3	67.3	54.8	42.8	35.1	31.8	22.0	17.2	13.5	10.4
87.5°	9.0	7.4	5.9	3.9	4.2	2.3	2.5	1.7	1.5	1.5	1.1
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: P149288

CATALOG NUMBER: VXS-E01-LED-E1-SL2-HSS-8030

**CANDELA DISTRIBUTION (continued):**

	83°	84°	85°	86°	87°	88°	89°	90°	95°	105°	115°
0°	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
2.5°	62.2	61.9	61.7	61.0	61.0	60.5	60.2	59.9	58.5	55.4	52.8
5°	65.3	64.7	64.1	63.3	62.7	61.9	61.3	60.5	57.4	51.5	46.4
7.5°	69.7	68.6	67.8	66.1	65.3	64.1	63.3	61.9	56.8	47.9	40.8
10°	75.1	73.2	71.7	69.7	68.1	66.6	65.3	63.3	56.3	43.9	35.8
12.5°	81.6	79.4	76.5	74.3	72.0	70.1	68.1	65.6	55.4	40.5	31.8
15°	88.1	84.7	82.7	79.6	76.5	73.7	70.9	68.6	55.8	36.9	28.4
17.5°	95.3	92.0	87.8	84.4	81.0	77.4	74.0	69.5	54.3	34.0	25.9
20°	102.4	97.6	93.7	89.4	84.7	80.2	76.0	72.0	53.2	31.2	23.6
22.5°	110.1	104.4	99.3	94.0	88.1	83.0	77.9	72.8	51.2	28.7	21.7
25°	119.3	112.8	105.5	99.1	92.8	86.6	80.2	74.0	49.2	26.4	20.2
27.5°	130.6	122.1	114.8	106.6	97.9	90.1	83.0	76.3	47.3	24.8	18.9
30°	144.9	135.0	124.7	114.2	105.0	96.0	86.1	77.6	45.3	23.1	17.4
32.5°	164.0	151.6	139.0	126.8	114.5	103.0	92.5	81.6	44.1	21.7	16.1
35°	189.3	173.3	157.8	142.6	127.8	113.7	100.1	87.8	44.1	20.0	14.3
37.5°	213.3	194.7	175.0	156.2	138.4	122.1	106.0	91.2	42.0	18.5	13.0
40°	239.2	216.9	193.9	171.6	150.3	129.9	111.7	94.5	40.0	16.9	11.5
42.5°	278.8	250.7	220.5	194.7	169.1	144.0	121.2	101.0	37.4	15.2	10.2
45°	330.9	295.1	259.7	228.2	195.5	164.9	137.8	112.8	36.9	13.8	8.7
47.5°	386.5	344.4	302.7	262.5	224.2	188.5	156.2	126.0	36.9	12.3	7.6
50°	442.0	389.1	344.7	297.9	254.9	212.6	174.1	139.8	37.1	11.3	6.2
52.5°	492.0	435.5	385.7	331.7	284.1	235.2	193.3	153.4	36.6	9.8	5.1
55°	561.6	495.1	437.5	377.8	322.1	266.9	219.5	173.6	36.9	8.7	4.2
57.5°	689.5	611.6	542.1	463.9	399.8	328.6	270.9	215.2	40.2	7.4	3.1
60°	873.3	772.0	674.3	579.0	497.4	412.7	337.9	272.3	47.3	5.9	2.3
62.5°	996.8	864.2	747.8	642.6	547.8	459.2	377.5	303.0	52.0	4.8	1.5
63°	1009.4	872.4	755.3	646.7	550.1	461.3	379.3	305.3	52.3	4.5	1.5
65°	1033.4	886.4	759.6	647.7	547.8	458.2	378.1	305.0	52.8	3.6	1.1
67.5°	1006.0	864.8	735.1	623.4	528.1	440.0	364.0	293.7	52.6	2.5	0.8
70°	899.7	782.7	668.7	564.7	478.0	398.3	331.4	267.9	48.4	1.7	0.5
72.5°	660.5	580.9	492.6	417.5	360.1	299.1	255.1	201.1	37.4	1.1	0.3
75°	195.9	178.3	149.9	132.2	116.8	96.5	85.8	66.9	19.2	0.5	0.0
77.5°	39.1	35.4	31.8	29.0	27.3	23.3	22.2	18.2	7.9	0.3	0.0
80°	20.5	16.9	14.3	12.6	11.0	9.0	7.6	6.2	1.5	0.0	0.0
82.5°	19.7	13.3	9.5	7.9	6.7	5.4	4.2	3.1	0.8	0.0	0.0
85°	7.4	5.6	4.2	3.4	2.8	2.5	2.0	1.7	0.0	0.0	0.0
87.5°	1.1	0.8	0.8	0.5	0.5	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: P149288

CATALOG NUMBER: VXS-E01-LED-E1-SL2-HSS-8030

**CANDELA DISTRIBUTION (continued):**

	125°	135°	145°	155°	165°	175°	180°
0°	59.4	59.4	59.4	59.4	59.4	59.4	59.4
2.5°	50.4	48.1	46.9	45.6	45.6	45.3	45.9
5°	42.0	38.9	36.6	34.9	35.1	34.3	34.6
7.5°	35.4	32.3	30.4	29.2	29.0	28.7	28.7
10°	30.7	27.9	26.1	25.3	25.1	25.1	25.1
12.5°	27.3	24.5	23.1	22.5	22.5	22.2	22.2
15°	24.5	22.2	20.8	20.2	20.2	20.0	20.2
17.5°	22.2	20.0	18.9	18.2	18.2	18.0	18.0
20°	20.2	18.2	17.2	16.3	16.3	16.1	16.3
22.5°	18.5	16.6	15.2	14.6	14.3	14.1	14.3
25°	16.9	14.9	13.5	12.6	12.3	12.3	12.1
27.5°	15.4	13.5	11.8	11.0	10.7	10.7	10.4
30°	14.1	11.8	10.2	9.3	9.0	9.0	9.0
32.5°	12.6	10.2	8.7	7.9	7.6	7.6	7.6
35°	11.3	8.7	7.4	6.4	6.2	6.2	6.2
37.5°	9.5	7.4	5.6	5.1	4.8	4.5	4.5
40°	8.2	5.6	4.2	3.6	3.1	3.1	3.1
42.5°	6.7	4.5	3.1	2.3	2.0	1.7	2.0
45°	5.6	3.4	2.0	1.1	0.8	0.8	0.8
47.5°	4.5	2.3	0.8	0.3	0.3	0.3	0.3
50°	3.4	1.5	0.3	0.0	0.0	0.3	0.3
52.5°	2.5	0.8	0.0	0.0	0.0	0.0	0.0
55°	1.5	0.3	0.0	0.0	0.0	0.0	0.0
57.5°	0.8	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°	0.3	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)