

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: P95424

Luminaire Tested: **VFS-K-B20-3-LED-E1-VAT-SG**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P95424
REPORT SCALED FROM IESNA LM79-08 TEST DATA (P22787)
Test Lab: INNOVATION CENTER
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: VFS-K-B20-3-LED-E1-VAT-SG
Description: ARCHITECTURAL FLOOD LUMINAIRE
VERTICAL ASYMMETRIC RECTANGULAR WITH SOFTENING GLASS DISTRIBUTION
WITH 20 LED'S, 350mA DRIVE CURRENT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp:	N/A	NEMA Type:	6H x 6V
Luminaire Lumens:	2275.7 lumens	Max Intensity:	1393.1 candela
Efficiency:	N/A	Max Intensity Angle:	19.5°H x 22.5°V
Efficacy:	95.2 lumens/watt		
Luminous Opening:	(L: 0.83 ' x W: 0 ' x H: 0.5 ')		
Beam Angle (50%):	88.1°H x 67.9°V	Field Angle (10%):	126°H x 116.1°V
Beam Lumens:	1435.8 lumens	Field Lumens:	2173.1 lumens
Beam Efficiency:	63.1%	Field Efficiency:	95.5%

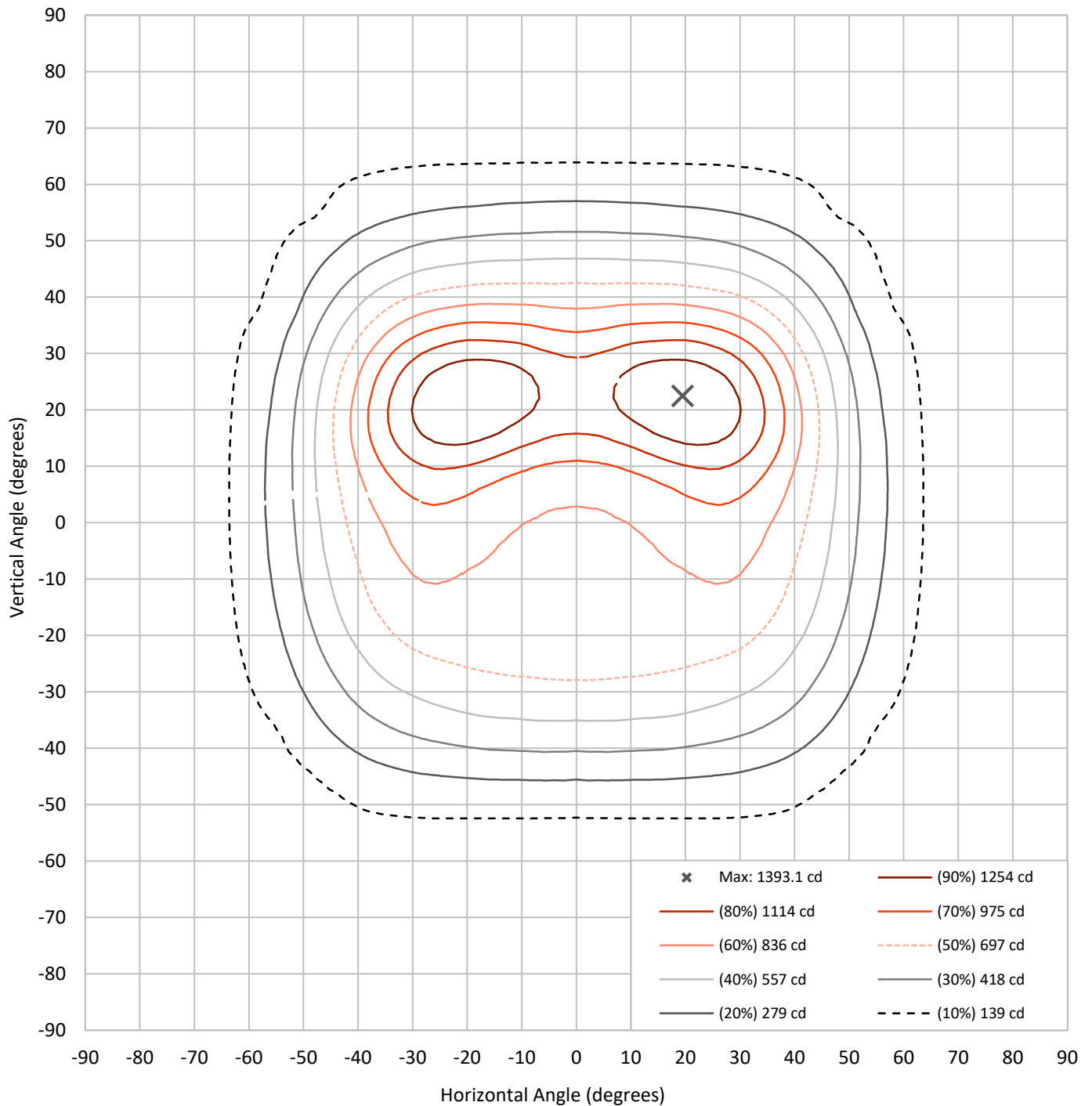
Input Watts (W): 23.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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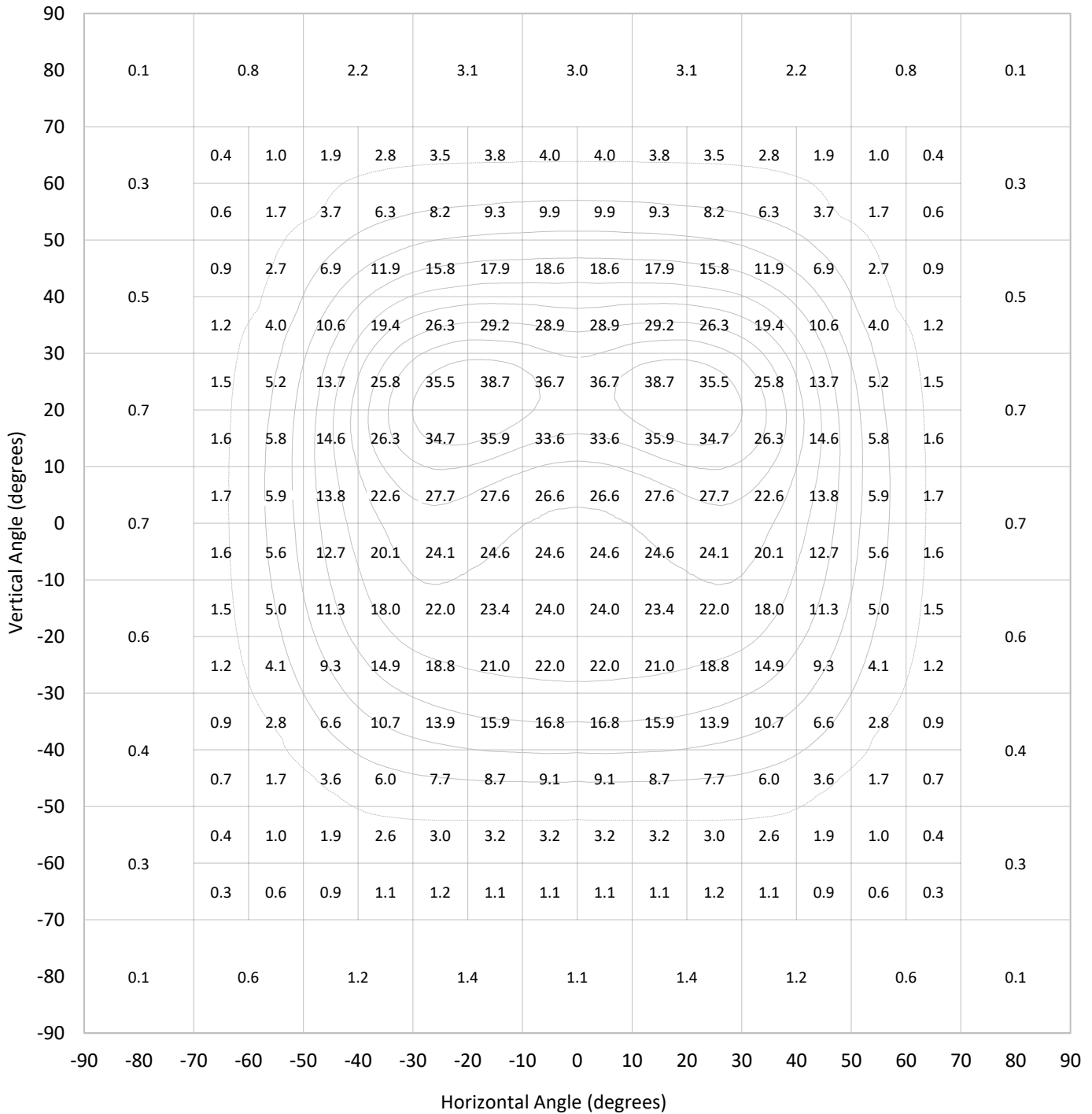
Iso-Candela Plot





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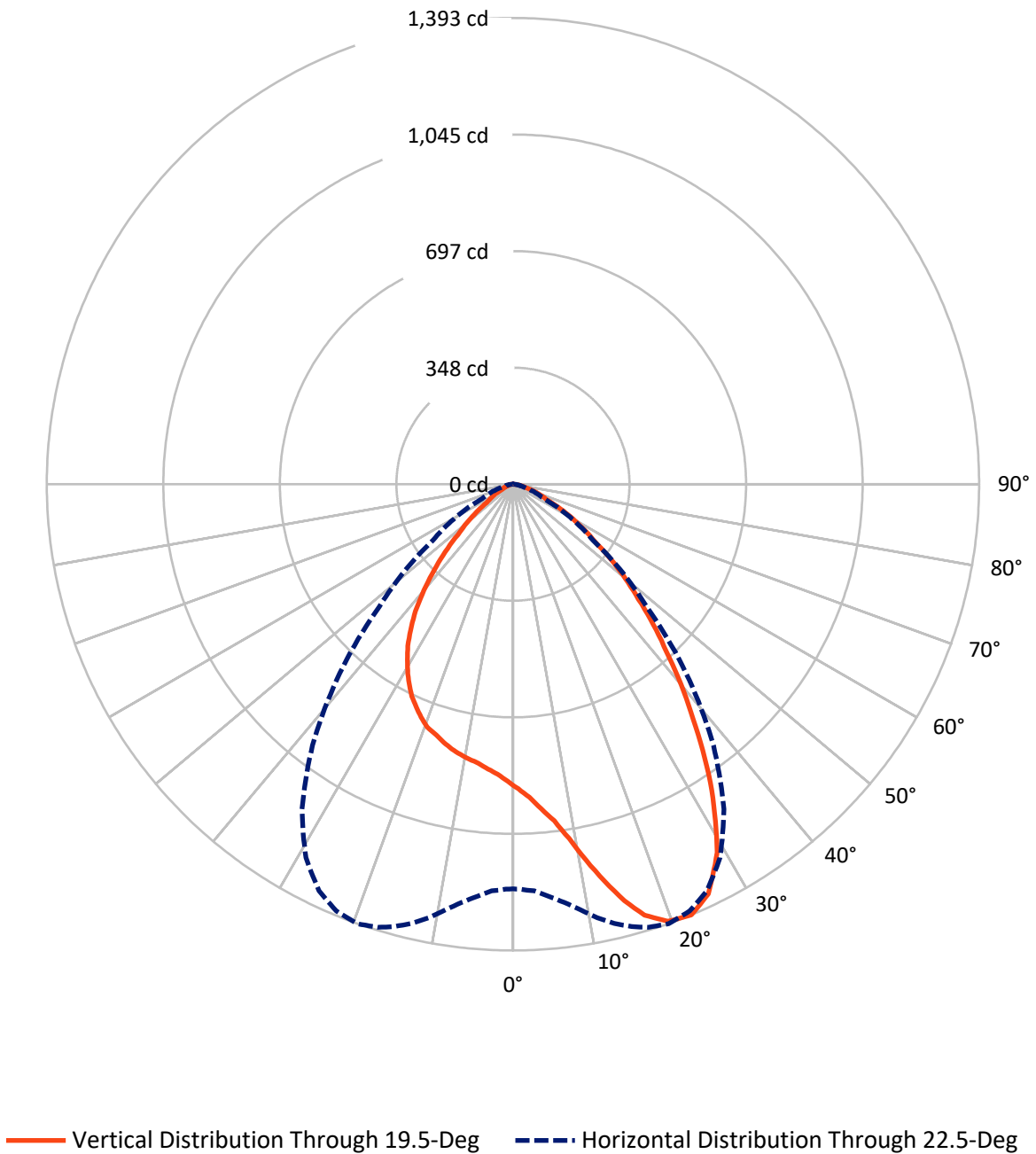
Lumen Table



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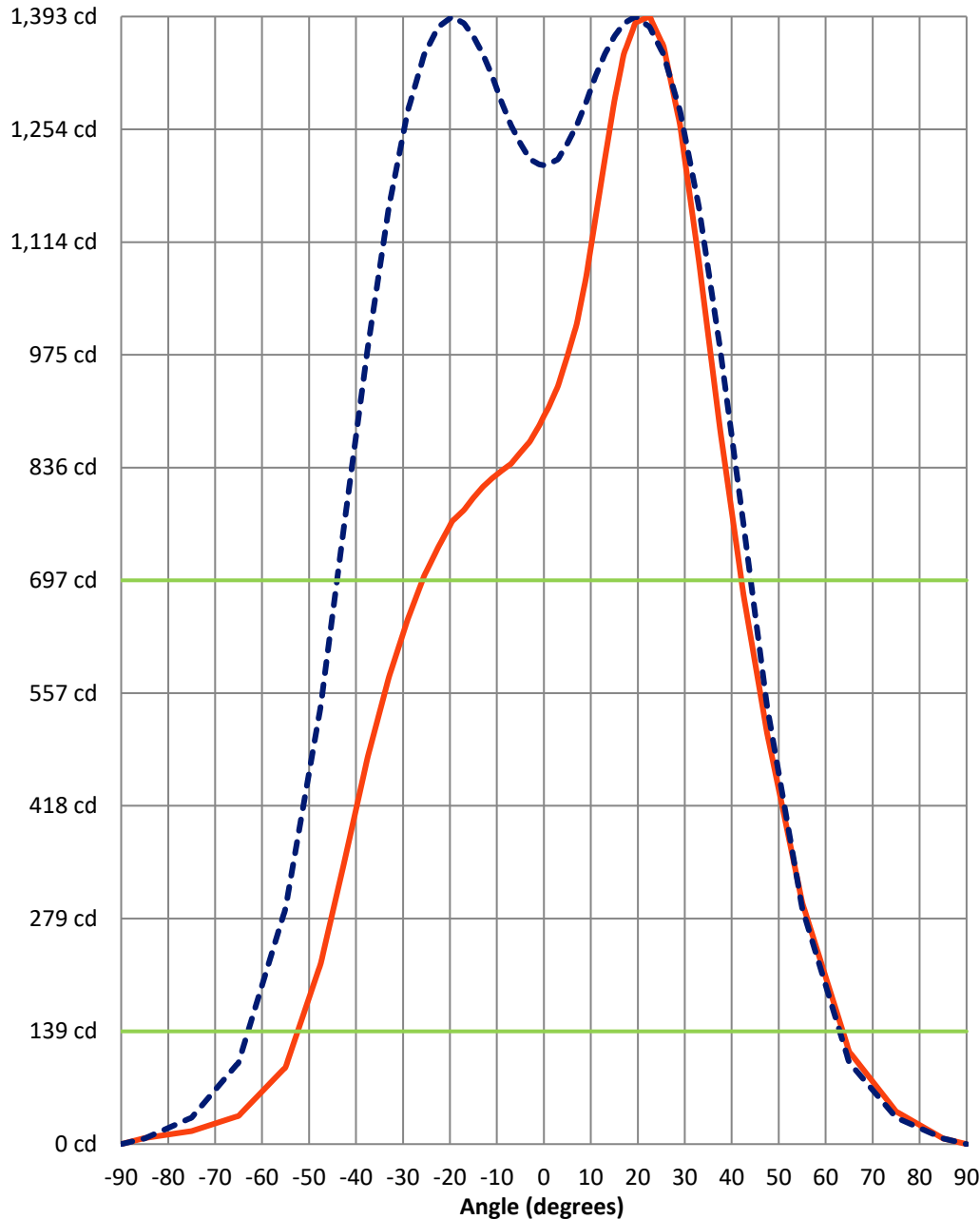
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Luminous Intensity Polar Plot



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Luminous Intensity Plot



Beam:
 H Angle: 88.1°
 V Angle: 67.9°
 Lumens: 1435.8
 Efficiency: 63.1%

Field:
 H Angle: 126°
 V Angle: 116.1°
 Lumens: 2173.1
 Efficiency: 95.5%

Spill:
 Lumens: 102.6
 Efficiency: 4.5%

— Vertical Distribution through 19.5-Deg
 - - - Horizontal Distribution through 22.5-Deg



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FIELD
BEAM

CANDELA DISTRIBUTION:

	0°	1°	3°	5°	7°	9°	11°	13°	15°	17°	19.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.5	1.1	3.2	5.4	5.9	6.4	6.4	7.0	7.0	7.0
75°	37.1	36.5	36.5	36.5	37.1	37.1	37.6	38.7	39.2	39.7	40.3
65°	117.1	117.1	116.0	114.9	116.0	117.6	115.5	113.3	115.5	114.4	114.4
55°	320.1	318.5	319.5	317.9	316.9	312.6	312.6	311.5	306.1	301.8	298.6
47.5°	534.9	532.7	537.0	532.7	533.8	526.8	525.2	523.6	522.5	517.7	508.6
42.5°	698.7	695.5	693.3	691.2	694.9	693.3	692.2	691.7	690.6	690.1	678.8
37.5°	849.1	850.1	856.0	858.7	872.7	878.6	882.9	884.5	886.1	888.3	884.0
33°	1002.1	1001.6	1012.3	1024.1	1041.8	1061.7	1073.5	1078.4	1083.7	1087.5	1091.3
29°	1127.8	1126.2	1138.5	1157.3	1175.6	1204.0	1226.1	1242.2	1256.1	1258.3	1258.8
25.5°	1192.8	1193.3	1200.8	1219.1	1248.1	1276.0	1309.3	1331.3	1345.8	1352.3	1356.0
22.5°	1209.4	1210.5	1216.9	1236.3	1258.8	1287.3	1319.5	1346.9	1368.4	1384.5	1393.1
19.5°	1179.3	1184.7	1191.1	1208.3	1237.3	1265.3	1293.2	1322.2	1348.5	1371.1	1385.6
17°	1145.5	1146.0	1150.9	1163.2	1189.0	1211.6	1237.9	1271.2	1299.6	1326.5	1346.3
15°	1093.9	1096.1	1098.8	1109.5	1131.0	1151.9	1177.7	1207.8	1237.3	1261.5	1288.3
13°	1034.9	1038.6	1036.5	1047.8	1071.4	1088.0	1109.0	1138.0	1164.3	1188.5	1217.5
11°	969.3	973.6	976.3	986.5	1001.0	1020.9	1040.8	1066.6	1091.3	1117.6	1144.4
9°	925.9	928.0	929.1	934.4	946.8	960.2	981.2	1001.6	1025.2	1045.1	1071.4
7°	885.0	887.2	887.2	890.4	903.3	912.4	928.5	946.8	965.1	985.5	1013.4
5°	854.4	856.6	860.3	865.7	875.9	886.1	897.4	911.9	932.3	947.9	973.6
3°	834.6	835.6	836.7	841.0	849.1	858.2	871.6	884.0	894.2	916.2	936.6
1°	822.2	824.9	823.8	826.5	835.6	841.0	852.8	861.9	872.1	891.5	910.3
0°	816.8	819.5	819.5	822.7	829.7	832.9	843.1	852.8	862.5	882.4	899.5
-1°	810.4	812.0	814.7	818.4	823.3	827.6	836.7	846.4	854.4	871.1	887.7
-3°	806.6	806.6	807.7	812.5	816.3	820.1	826.5	834.6	842.6	853.4	867.9
-5°	801.8	802.9	806.1	808.8	814.1	816.3	820.1	827.6	835.1	845.3	854.4
-7°	801.8	802.3	804.5	807.2	807.7	812.5	816.8	821.1	826.5	835.6	840.5
-9°	806.6	807.2	805.0	806.6	809.3	812.5	814.7	817.4	819.0	824.9	831.9
-11°	798.6	798.6	798.6	796.4	800.2	805.6	807.7	810.9	813.1	816.8	822.7
-13°	794.3	796.4	794.8	795.4	797.5	799.6	801.8	804.5	803.4	805.6	812.0
-15°	787.8	789.4	792.1	794.8	797.0	797.5	797.0	797.5	795.4	796.4	798.6
-17°	782.5	785.1	786.8	787.3	790.5	786.8	786.2	789.4	790.5	786.8	783.5
-19.5°	777.1	777.1	776.6	777.6	778.2	783.0	779.2	775.5	772.3	771.2	769.6
-22.5°	756.1	756.1	752.4	755.1	755.6	756.1	754.5	751.3	746.5	743.3	737.4
-25.5°	728.2	728.8	726.6	726.6	723.9	723.4	721.8	720.7	713.7	708.9	701.9
-29°	682.0	684.2	681.0	681.5	676.7	673.4	670.2	665.9	661.1	656.3	648.2
-33°	602.6	606.3	605.2	604.2	604.2	601.5	594.5	593.4	591.8	587.5	576.8
-37.5°	501.6	504.3	502.1	504.8	503.7	501.6	498.4	494.1	490.9	487.1	478.5
-42.5°	361.4	365.7	365.2	367.9	364.6	362.5	360.9	360.4	359.3	358.2	348.5
-47.5°	225.6	229.9	229.9	227.7	230.9	229.3	226.6	227.2	227.7	225.0	223.4
-55°	90.2	91.8	90.8	91.3	92.4	92.4	92.9	93.4	92.4	94.5	95.1
-65°	30.6	31.1	30.6	31.7	31.1	31.7	31.7	31.7	32.8	33.3	34.9
-75°	11.3	11.3	11.3	11.3	11.8	12.4	13.4	14.0	15.0	15.6	16.1
-85°	1.1	1.1	2.7	5.4	7.5	8.1	8.1	8.1	8.1	8.1	7.5
-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: VFS-K-B20-3-LED-E1-VAT-SG

CANDELA DISTRIBUTION (continued):

	22.5°	25.5°	29°	33°	37.5°	42.5°	47.5°	55°	65°	75°	85°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.0	6.4	7.0	7.0	7.0	6.4	5.9	6.4	6.4	5.9	5.4
75°	40.3	40.8	40.3	39.7	37.6	34.4	30.1	22.0	13.4	7.5	5.9
65°	113.3	113.3	110.6	106.9	101.0	90.8	76.8	52.1	26.3	11.8	6.4
55°	293.2	284.6	272.3	255.1	227.7	193.9	128.4	96.1	41.9	17.2	7.0
47.5°	499.4	487.1	466.1	430.2	379.1	312.6	240.6	134.8	57.5	20.4	7.0
42.5°	664.3	649.3	626.7	575.2	504.8	408.1	305.0	154.7	65.5	24.2	7.0
37.5°	870.0	848.0	812.0	747.6	643.4	510.2	376.5	171.9	74.1	26.9	7.0
33°	1074.1	1040.8	990.3	908.7	773.3	604.7	439.8	230.9	84.3	29.0	7.5
29°	1240.6	1203.0	1141.7	1034.9	881.3	682.0	487.6	257.2	91.3	30.6	7.0
25.5°	1338.8	1301.2	1232.5	1116.0	948.4	734.1	520.9	278.2	97.2	31.7	7.5
22.5°	1380.2	1345.8	1276.0	1157.8	983.8	765.8	541.9	291.6	101.0	32.8	7.0
19.5°	1379.6	1351.7	1288.9	1174.5	1005.9	785.7	559.6	301.8	103.6	33.3	7.5
17°	1345.3	1324.9	1269.0	1164.3	1002.6	788.9	567.1	308.8	105.3	33.8	7.0
15°	1296.9	1280.8	1233.6	1136.4	989.2	786.2	570.9	314.7	106.3	34.4	7.0
13°	1227.7	1224.4	1183.1	1102.5	965.1	774.4	573.0	318.5	107.9	34.4	7.0
11°	1157.8	1161.1	1129.9	1058.5	937.1	759.9	571.9	319.0	109.0	34.4	7.0
9°	1090.7	1101.5	1077.8	1014.5	908.7	748.1	566.0	321.1	110.1	34.4	7.0
7°	1037.0	1053.7	1027.9	980.1	880.7	732.5	562.8	323.3	109.6	34.9	7.0
5°	994.1	1008.0	996.2	950.0	856.6	717.5	559.6	322.2	109.6	34.9	7.0
3°	960.2	973.6	962.9	915.1	835.6	707.3	553.1	321.1	110.6	34.9	7.0
1°	930.7	943.0	937.1	887.7	818.4	693.3	544.6	319.5	110.6	34.9	7.0
0°	916.2	928.0	925.3	878.6	808.2	685.3	541.3	317.4	110.1	34.9	7.0
-1°	904.4	916.7	913.0	870.0	798.6	679.4	538.1	315.8	110.1	34.9	7.0
-3°	881.8	896.3	893.6	856.0	784.6	671.8	530.1	312.6	109.0	34.9	7.0
-5°	868.4	885.0	878.6	842.6	770.6	658.9	525.2	309.3	107.9	34.4	7.0
-7°	855.0	866.8	863.0	823.3	755.6	643.4	513.4	305.6	106.3	33.8	7.0
-9°	838.9	849.6	847.4	808.2	739.0	632.6	503.7	299.1	104.7	33.8	7.0
-11°	831.3	836.2	829.7	795.9	725.0	619.7	493.0	292.7	102.6	33.3	7.0
-13°	816.8	819.5	813.1	782.5	708.4	603.1	480.6	284.6	100.4	32.8	7.0
-15°	801.3	802.9	796.4	762.6	692.2	589.1	467.8	276.0	98.3	32.2	7.0
-17°	784.6	784.1	774.4	736.3	671.8	570.3	451.6	267.4	96.1	31.7	6.4
-19.5°	764.7	760.4	746.5	708.4	643.4	545.1	430.2	255.1	92.4	31.1	7.0
-22.5°	730.4	722.3	704.6	667.5	603.1	511.8	404.4	237.9	87.5	30.1	6.4
-25.5°	690.6	677.2	656.3	620.8	559.6	475.3	374.3	217.0	83.2	29.0	7.0
-29°	633.2	617.6	595.6	562.8	511.3	428.6	335.6	193.9	76.3	27.9	7.0
-33°	563.4	547.2	523.6	491.4	444.1	375.4	290.5	165.9	68.2	25.8	7.0
-37.5°	464.5	450.6	431.2	405.5	363.6	305.6	237.9	125.7	59.1	23.6	7.0
-42.5°	342.1	331.9	321.7	299.7	272.3	228.8	161.1	108.5	51.0	20.9	7.0
-47.5°	220.7	217.0	211.6	200.9	184.7	151.4	120.3	85.4	43.5	18.3	7.0
-55°	97.2	98.8	98.8	98.8	96.7	90.8	80.0	58.0	31.1	15.0	6.4
-65°	36.5	37.6	39.2	40.8	41.9	41.9	39.2	31.7	19.9	10.7	5.9
-75°	16.6	17.2	17.2	17.7	18.3	17.7	17.2	15.0	10.7	7.5	5.9
-85°	7.5	7.0	7.0	7.0	6.4	6.4	6.4	6.4	6.4	5.9	5.4
-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: VFS-K-B20-3-LED-E1-VAT-SG

CANDELA DISTRIBUTION (continued):

	90°
90°	0.0
85°	0.0
75°	0.0
65°	0.0
55°	0.0
47.5°	0.0
42.5°	0.0
37.5°	0.0
33°	0.0
29°	0.0
25.5°	0.0
22.5°	0.0
19.5°	0.0
17°	0.0
15°	0.0
13°	0.0
11°	0.0
9°	0.0
7°	0.0
5°	0.0
3°	0.0
1°	0.0
0°	0.0
-1°	0.0
-3°	0.0
-5°	0.0
-7°	0.0
-9°	0.0
-11°	0.0
-13°	0.0
-15°	0.0
-17°	0.0
-19.5°	0.0
-22.5°	0.0
-25.5°	0.0
-29°	0.0
-33°	0.0
-37.5°	0.0
-42.5°	0.0
-47.5°	0.0
-55°	0.0
-65°	0.0
-75°	0.0
-85°	0.0
-90°	0.0

(END OF REPORT)