

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: P95425

Luminaire Tested: **VFS-K-B20-5-LED-E1-VAT-SG**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P95425
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-B20-5-LED-E1-VAT-SG
Description: ARCHITECTURAL FLOOD LUMINAIRE
VERTICAL ASYMMETRIC RECTANGULAR WITH SOFTENING GLASS DISTRIBUTION
WITH 20 LED'S, 525mA DRIVE CURRENT
Light Source: -
Ballast/Driver: -

Summary

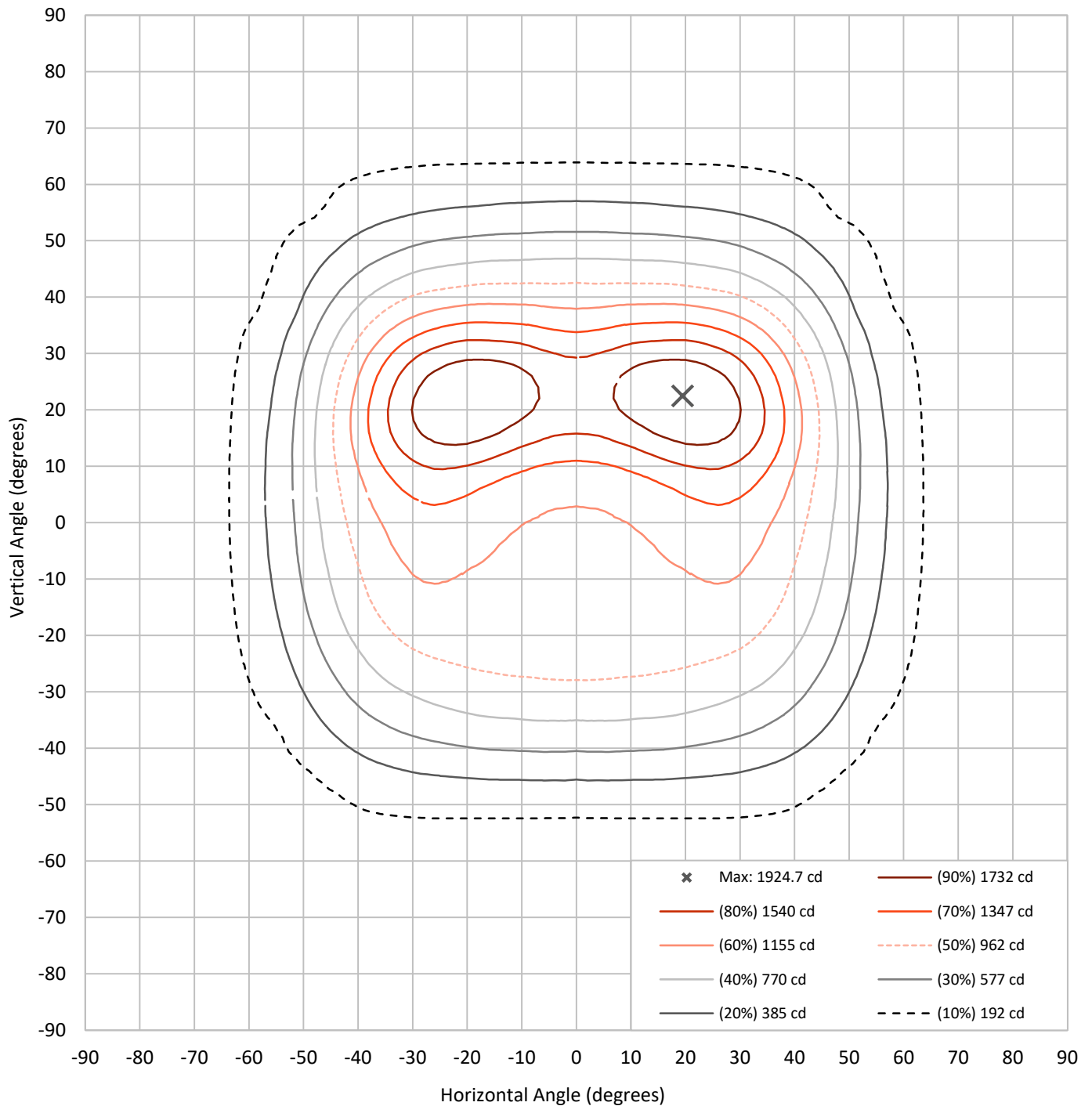
Lumens per Lamp:	N/A	NEMA Type:	6H x 6V
Luminaire Lumens:	3144.1 lumens	Max Intensity:	1924.7 candela
Efficiency:	N/A	Max Intensity Angle:	19.5°H x 22.5°V
Efficacy:	90.1 lumens/watt		
Luminous Opening:	(L: 0.83 ' x W: 0 ' x H: 0.5 ')		
Beam Angle (50%):	88.1°H x 67.9°V	Field Angle (10%):	126°H x 116.1°V
Beam Lumens:	1983.7 lumens	Field Lumens:	3002.3 lumens
Beam Efficiency:	63.1%	Field Efficiency:	95.5%

Input Watts (W): 34.9
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: P95425
CATALOG NUMBER: VFS-K-B20-5-LED-E1-VAT-SG

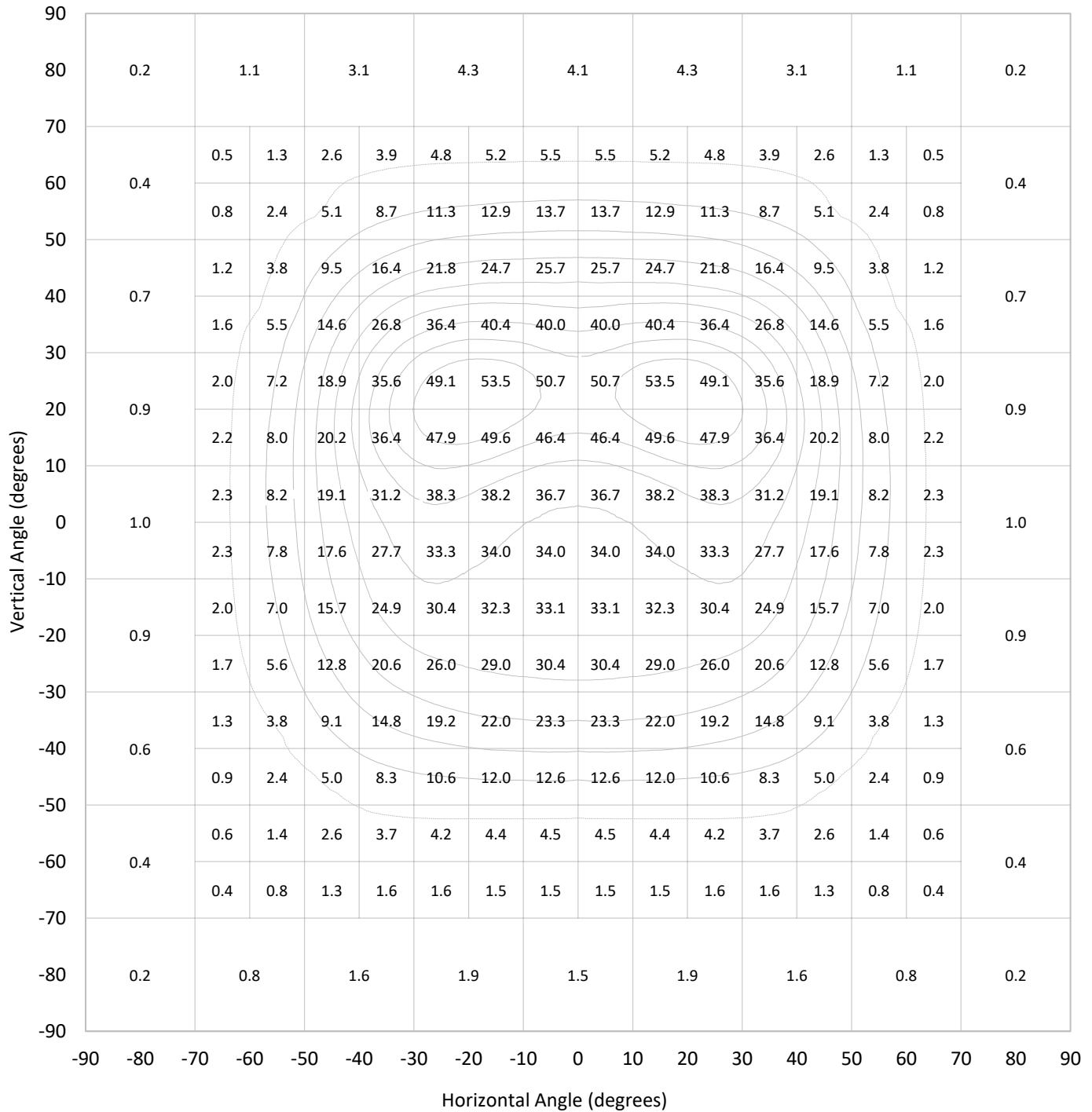
Iso-Candela Plot





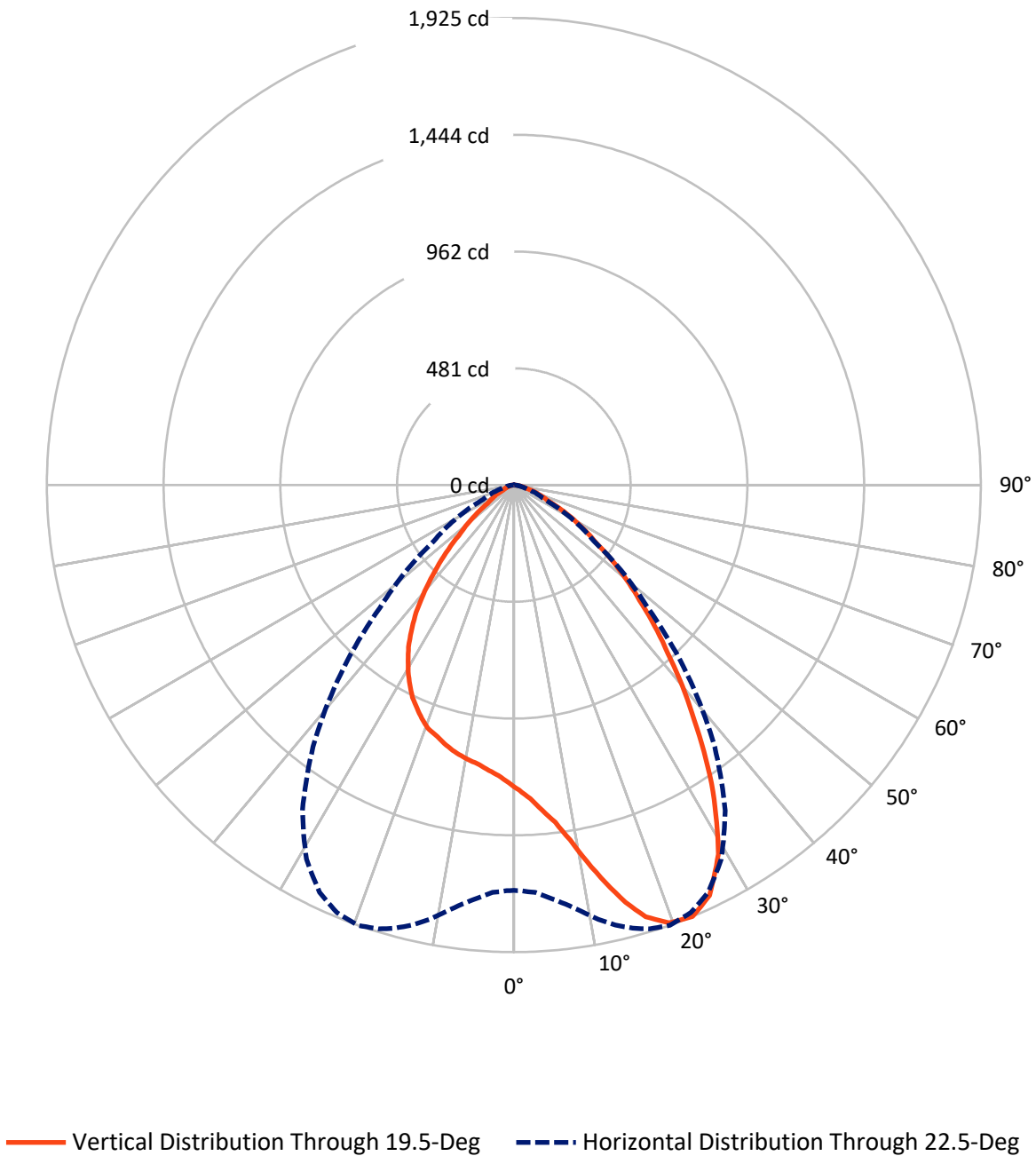
REPORT NUMBER: P95425
 CATALOG NUMBER: VFS-K-B20-5-LED-E1-VAT-SG

Lumen Table



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CATALOG NUMBER: VFS-K-B20-5-LED-E1-VAT-SG

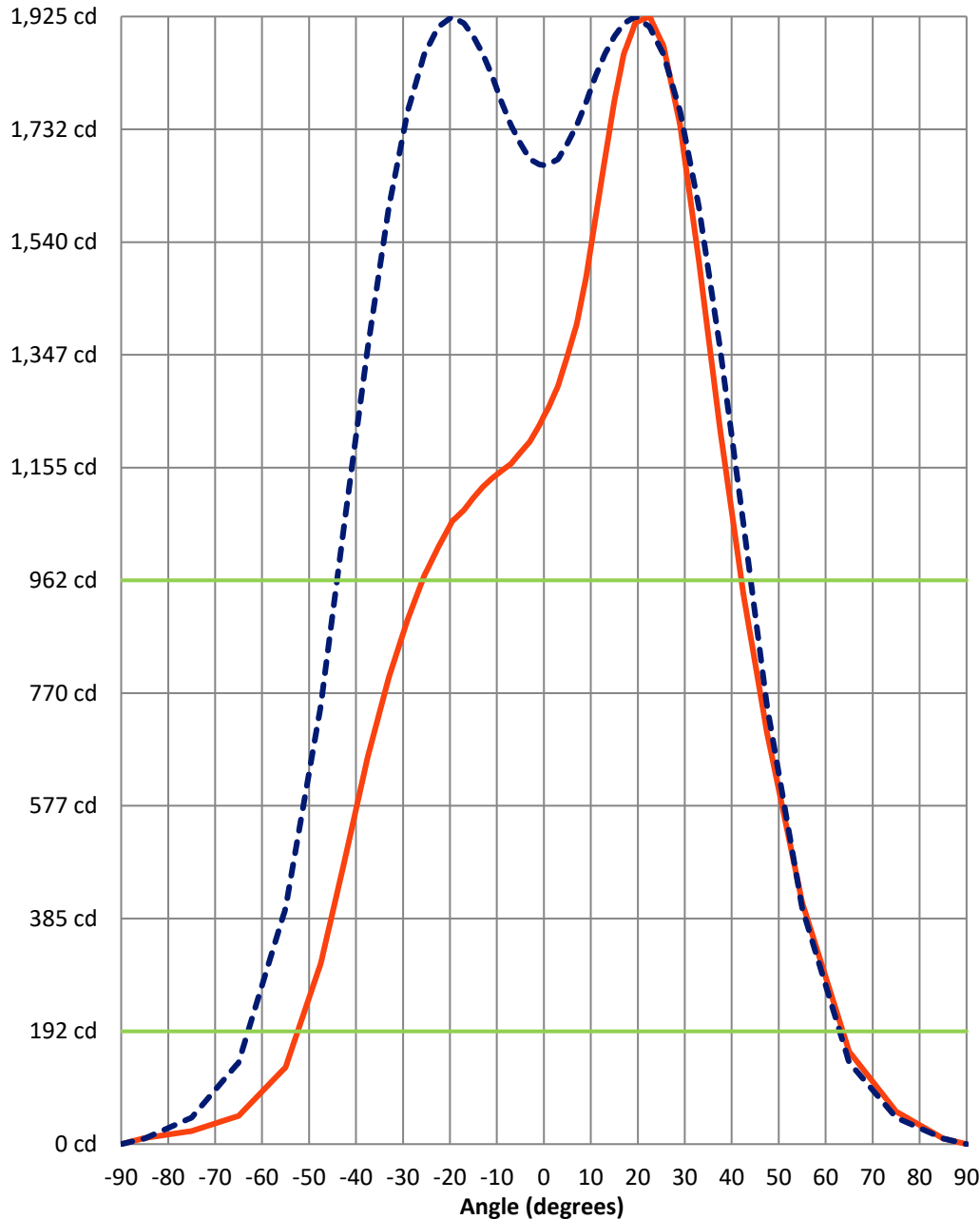
Luminous Intensity Polar Plot



REPORT NUMBER: P95425

CATALOG NUMBER: VFS-K-B20-5-LED-E1-VAT-SG

Luminous Intensity Plot



Beam:
 H Angle: 88.1°
 V Angle: 67.9°
 Lumens: 1983.7
 Efficiency: 63.1%

Field:
 H Angle: 126°
 V Angle: 116.1°
 Lumens: 3002.3
 Efficiency: 95.5%

Spill:
 Lumens: 141.7
 Efficiency: 4.5%

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



REPORT NUMBER: P95425

CATALOG NUMBER: VFS-K-B20-5-LED-E1-VAT-SG

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	0.7	1.5	4.5	7.4	8.2	8.9	8.9	9.6	9.6	9.6
75°	51.2	50.5	50.5	50.5	51.2	51.2	51.9	53.4	54.2	54.9	55.6
65°	161.7	161.7	160.3	158.8	160.3	162.5	159.5	156.6	159.5	158.0	158.0
55°	442.2	440.0	441.5	439.2	437.8	431.8	431.8	430.3	422.9	417.0	412.5
47.5°	739.0	736.0	742.0	736.0	737.5	727.9	725.6	723.4	721.9	715.3	702.6
42.5°	965.3	960.8	957.9	954.9	960.1	957.9	956.4	955.7	954.2	953.4	937.8
37.5°	1173.0	1174.5	1182.7	1186.4	1205.7	1213.9	1219.8	1222.0	1224.2	1227.2	1221.3
33°	1384.5	1383.8	1398.6	1414.9	1439.4	1466.9	1483.2	1489.9	1497.3	1502.5	1507.7
29°	1558.1	1555.9	1573.0	1598.9	1624.2	1663.5	1693.9	1716.2	1735.5	1738.4	1739.2
25.5°	1647.9	1648.6	1659.0	1684.3	1724.3	1762.9	1808.9	1839.3	1859.4	1868.3	1873.5
22.5°	1670.9	1672.4	1681.3	1708.0	1739.2	1778.5	1823.0	1860.8	1890.5	1912.8	1924.7
19.5°	1629.4	1636.8	1645.7	1669.4	1709.5	1748.1	1786.7	1826.7	1863.1	1894.2	1914.3
17°	1582.6	1583.4	1590.0	1607.1	1642.7	1673.9	1710.2	1756.2	1795.6	1832.7	1860.1
15°	1511.4	1514.4	1518.1	1532.9	1562.6	1591.5	1627.1	1668.7	1709.5	1742.9	1780.0
13°	1429.8	1435.0	1432.0	1447.6	1480.2	1503.2	1532.2	1572.2	1608.6	1642.0	1682.0
11°	1339.2	1345.2	1348.9	1363.0	1383.0	1410.5	1437.9	1473.5	1507.7	1544.0	1581.1
9°	1279.1	1282.1	1283.6	1291.0	1308.1	1326.6	1355.6	1383.8	1416.4	1443.9	1480.2
7°	1222.8	1225.7	1225.7	1230.2	1248.0	1260.6	1282.9	1308.1	1333.3	1361.5	1400.1
5°	1180.5	1183.4	1188.6	1196.0	1210.1	1224.2	1239.8	1259.9	1288.1	1309.6	1345.2
3°	1153.0	1154.5	1156.0	1161.9	1173.0	1185.7	1204.2	1221.3	1235.4	1265.8	1294.0
1°	1135.9	1139.7	1138.2	1141.9	1154.5	1161.9	1178.2	1190.9	1205.0	1231.7	1257.6
0°	1128.5	1132.2	1132.2	1136.7	1146.3	1150.8	1164.9	1178.2	1191.6	1219.0	1242.8
-1°	1119.6	1121.9	1125.6	1130.8	1137.4	1143.4	1156.0	1169.3	1180.5	1203.5	1226.5
-3°	1114.4	1114.4	1115.9	1122.6	1127.8	1133.0	1141.9	1153.0	1164.1	1179.0	1199.0
-5°	1107.8	1109.2	1113.7	1117.4	1124.8	1127.8	1133.0	1143.4	1153.8	1167.9	1180.5
-7°	1107.8	1108.5	1111.5	1115.2	1115.9	1122.6	1128.5	1134.5	1141.9	1154.5	1161.2
-9°	1114.4	1115.2	1112.2	1114.4	1118.1	1122.6	1125.6	1129.3	1131.5	1139.7	1149.3
-11°	1103.3	1103.3	1103.3	1100.3	1105.5	1112.9	1115.9	1120.4	1123.3	1128.5	1136.7
-13°	1097.4	1100.3	1098.1	1098.9	1101.8	1104.8	1107.8	1111.5	1110.0	1112.9	1121.9
-15°	1088.5	1090.7	1094.4	1098.1	1101.1	1101.8	1101.1	1101.8	1098.9	1100.3	1103.3
-17°	1081.0	1084.8	1087.0	1087.7	1092.2	1087.0	1086.2	1090.7	1092.2	1087.0	1082.5
-19.5°	1073.6	1073.6	1072.9	1074.4	1075.1	1081.8	1076.6	1071.4	1066.9	1065.5	1063.2
-22.5°	1044.7	1044.7	1039.5	1043.2	1043.9	1044.7	1042.5	1038.0	1031.3	1026.9	1018.7
-25.5°	1006.1	1006.8	1003.9	1003.9	1000.2	999.4	997.2	995.7	986.1	979.4	969.7
-29°	942.3	945.3	940.8	941.6	934.9	930.4	926.0	920.0	913.4	906.7	895.6
-33°	832.5	837.7	836.2	834.7	834.7	831.0	821.4	819.9	817.6	811.7	796.9
-37.5°	693.0	696.7	693.7	697.4	696.0	693.0	688.5	682.6	678.2	673.0	661.1
-42.5°	499.3	505.3	504.5	508.2	503.8	500.8	498.6	497.9	496.4	494.9	481.5
-47.5°	311.6	317.6	317.6	314.6	319.0	316.8	313.1	313.9	314.6	310.9	308.7
-55°	124.7	126.9	125.4	126.1	127.6	127.6	128.4	129.1	127.6	130.6	131.3
-65°	42.3	43.0	42.3	43.8	43.0	43.8	43.8	43.8	45.3	46.0	48.2
-75°	15.6	15.6	15.6	15.6	16.3	17.1	18.5	19.3	20.8	21.5	22.3
-85°	1.5	1.5	3.7	7.4	10.4	11.1	11.1	11.1	11.1	11.1	10.4
-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: P95425

CATALOG NUMBER: VFS-K-B20-5-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°	9.6	8.9	9.6	9.6	9.6	8.9	8.2	8.9	8.9	8.2	7.4
75°	55.6	56.4	55.6	54.9	51.9	47.5	41.6	30.4	18.5	10.4	8.2
65°	156.6	156.6	152.8	147.7	139.5	125.4	106.1	72.0	36.4	16.3	8.9
55°	405.1	393.2	376.2	352.4	314.6	267.8	177.3	132.8	57.9	23.7	9.6
47.5°	690.0	673.0	644.0	594.3	523.8	431.8	332.4	186.2	79.4	28.2	9.6
42.5°	917.8	897.0	865.9	794.6	697.4	563.9	421.4	213.7	90.5	33.4	9.6
37.5°	1202.0	1171.6	1121.9	1032.8	888.9	704.9	520.1	237.4	102.4	37.1	9.6
33°	1483.9	1437.9	1368.2	1255.4	1068.4	835.5	607.7	319.0	116.5	40.1	10.4
29°	1713.9	1662.0	1577.4	1429.8	1217.6	942.3	673.7	355.4	126.1	42.3	9.6
25.5°	1849.7	1797.8	1702.8	1541.8	1310.3	1014.3	719.7	384.3	134.3	43.8	10.4
22.5°	1906.9	1859.4	1762.9	1599.7	1359.3	1058.0	748.6	402.9	139.5	45.3	9.6
19.5°	1906.1	1867.5	1780.7	1622.7	1389.7	1085.5	773.1	417.0	143.2	46.0	10.4
17°	1858.6	1830.4	1753.3	1608.6	1385.2	1089.9	783.5	426.6	145.4	46.7	9.6
15°	1791.8	1769.6	1704.3	1570.0	1366.7	1086.2	788.7	434.8	146.9	47.5	9.6
13°	1696.1	1691.7	1634.5	1523.3	1333.3	1069.9	791.7	440.0	149.1	47.5	9.6
11°	1599.7	1604.1	1561.1	1462.4	1294.7	1049.9	790.2	440.7	150.6	47.5	9.6
9°	1506.9	1521.8	1489.1	1401.6	1255.4	1033.6	782.0	443.7	152.1	47.5	9.6
7°	1432.7	1455.7	1420.1	1354.1	1216.8	1012.0	777.6	446.7	151.4	48.2	9.6
5°	1373.4	1392.7	1376.3	1312.5	1183.4	991.3	773.1	445.2	151.4	48.2	9.6
3°	1326.6	1345.2	1330.3	1264.3	1154.5	977.2	764.2	443.7	152.8	48.2	9.6
1°	1285.8	1302.9	1294.7	1226.5	1130.8	957.9	752.4	441.5	152.8	48.2	9.6
0°	1265.8	1282.1	1278.4	1213.9	1116.7	946.7	747.9	438.5	152.1	48.2	9.6
-1°	1249.5	1266.5	1261.3	1202.0	1103.3	938.6	743.4	436.3	152.1	48.2	9.6
-3°	1218.3	1238.3	1234.6	1182.7	1084.0	928.2	732.3	431.8	150.6	48.2	9.6
-5°	1199.8	1222.8	1213.9	1164.1	1064.7	910.4	725.6	427.4	149.1	47.5	9.6
-7°	1181.2	1197.5	1192.3	1137.4	1043.9	888.9	709.3	422.2	146.9	46.7	9.6
-9°	1158.9	1173.8	1170.8	1116.7	1020.9	874.0	696.0	413.3	144.7	46.7	9.6
-11°	1148.6	1155.2	1146.3	1099.6	1001.7	856.2	681.1	404.4	141.7	46.0	9.6
-13°	1128.5	1132.2	1123.3	1081.0	978.7	833.2	664.1	393.2	138.7	45.3	9.6
-15°	1107.0	1109.2	1100.3	1053.6	956.4	813.9	646.3	381.4	135.8	44.5	9.6
-17°	1084.0	1083.3	1069.9	1017.2	928.2	788.0	624.0	369.5	132.8	43.8	8.9
-19.5°	1056.6	1050.6	1031.3	978.7	888.9	753.1	594.3	352.4	127.6	43.0	9.6
-22.5°	1009.1	997.9	973.5	922.3	833.2	707.1	558.7	328.7	120.9	41.6	8.9
-25.5°	954.2	935.6	906.7	857.7	773.1	656.6	517.1	299.8	115.0	40.1	9.6
-29°	874.8	853.3	822.8	777.6	706.4	592.1	463.7	267.8	105.4	38.6	9.6
-33°	778.3	756.1	723.4	678.9	613.6	518.6	401.4	229.3	94.2	35.6	9.6
-37.5°	641.8	622.5	595.8	560.2	502.3	422.2	328.7	173.6	81.6	32.6	9.6
-42.5°	472.6	458.5	444.4	414.0	376.2	316.1	222.6	149.9	70.5	28.9	9.6
-47.5°	304.9	299.8	292.3	277.5	255.2	209.2	166.2	118.0	60.1	25.2	9.6
-55°	134.3	136.5	136.5	136.5	133.6	125.4	110.6	80.1	43.0	20.8	8.9
-65°	50.5	51.9	54.2	56.4	57.9	57.9	54.2	43.8	27.5	14.8	8.2
-75°	23.0	23.7	23.7	24.5	25.2	24.5	23.7	20.8	14.8	10.4	8.2
-85°	10.4	9.6	9.6	9.6	8.9	8.9	8.9	8.9	8.9	8.2	7.4
-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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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)