

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: P95426

Luminaire Tested: **VFS-K-B20-7-LED-E1-VAT-SG**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P95426
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-B20-7-LED-E1-VAT-SG
Description: ARCHITECTURAL FLOOD LUMINAIRE
VERTICAL ASYMMETRIC RECTANGULAR WITH SOFTENING GLASS DISTRIBUTION
WITH 20 LED'S, 700mA DRIVE CURRENT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp:	N/A	NEMA Type:	6H x 6V
Luminaire Lumens:	3716.1 lumens	Max Intensity:	2274.8 candela
Efficiency:	N/A	Max Intensity Angle:	19.5°H x 22.5°V
Efficacy:	76.5 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:	2344.5 lumens	Field Lumens:	3548.6 lumens
Beam Efficiency:	63.1%	Field Efficiency:	95.5%

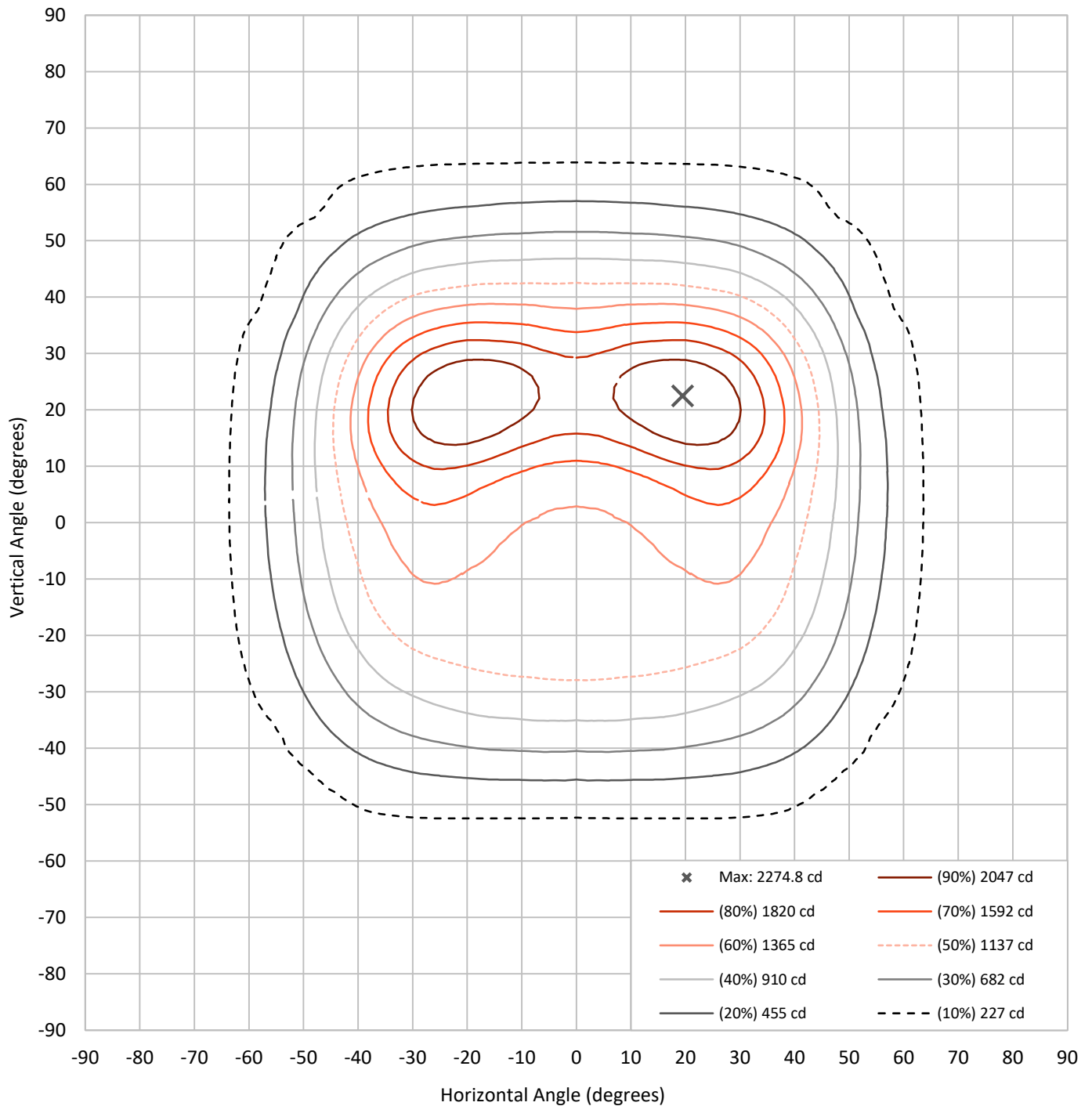
Input Watts (W): 48.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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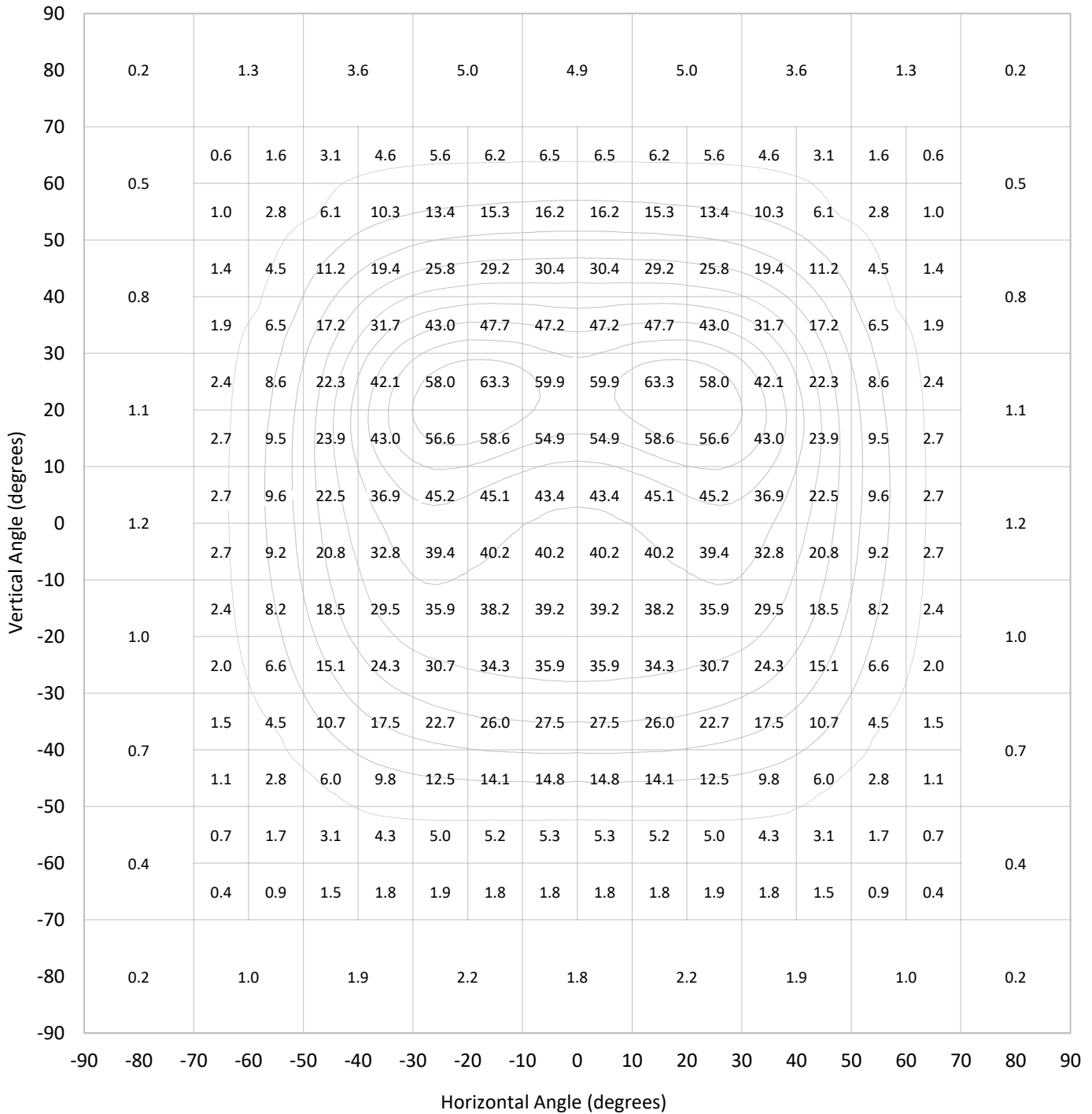
Iso-Candela Plot





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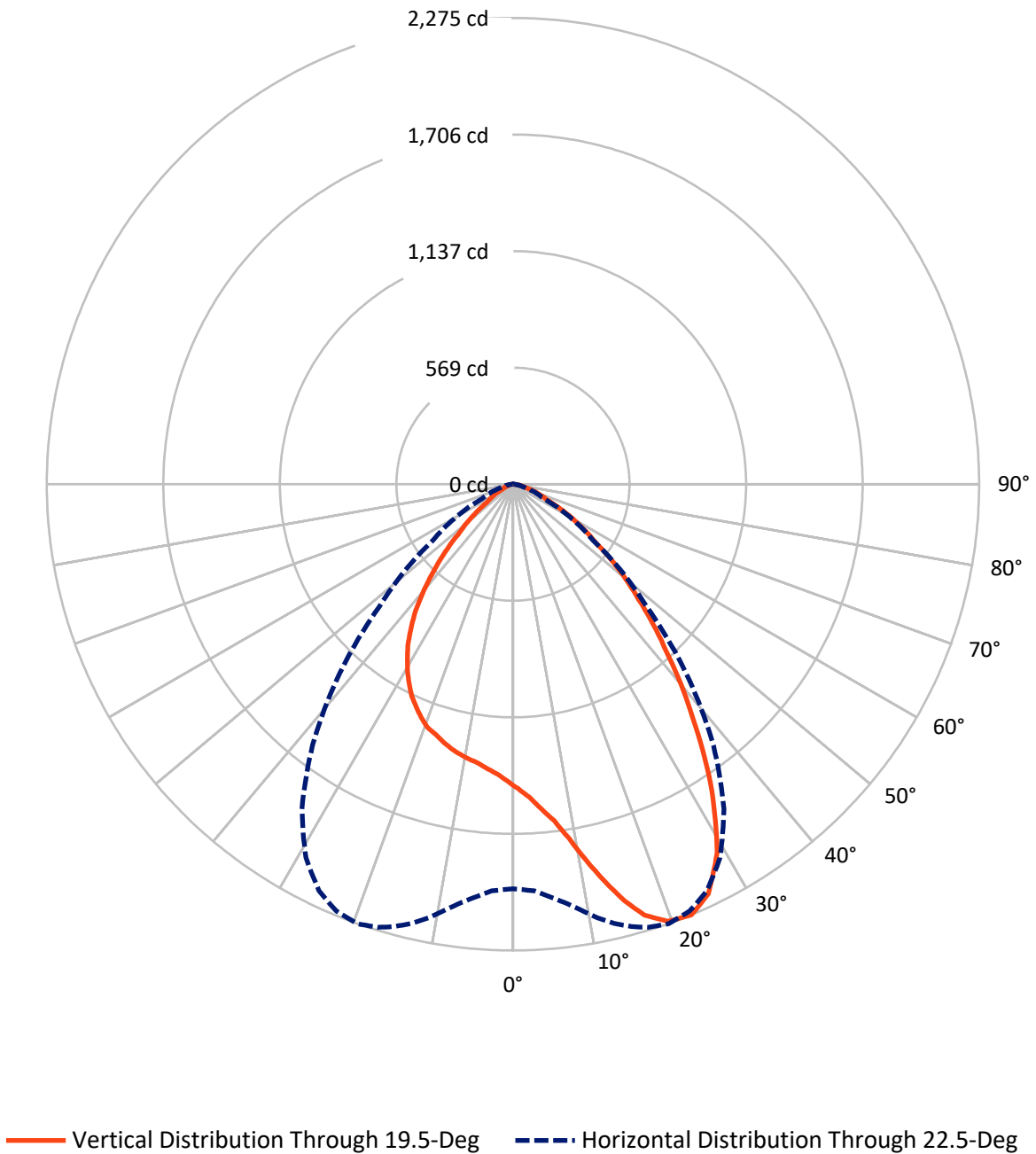
Lumen Table



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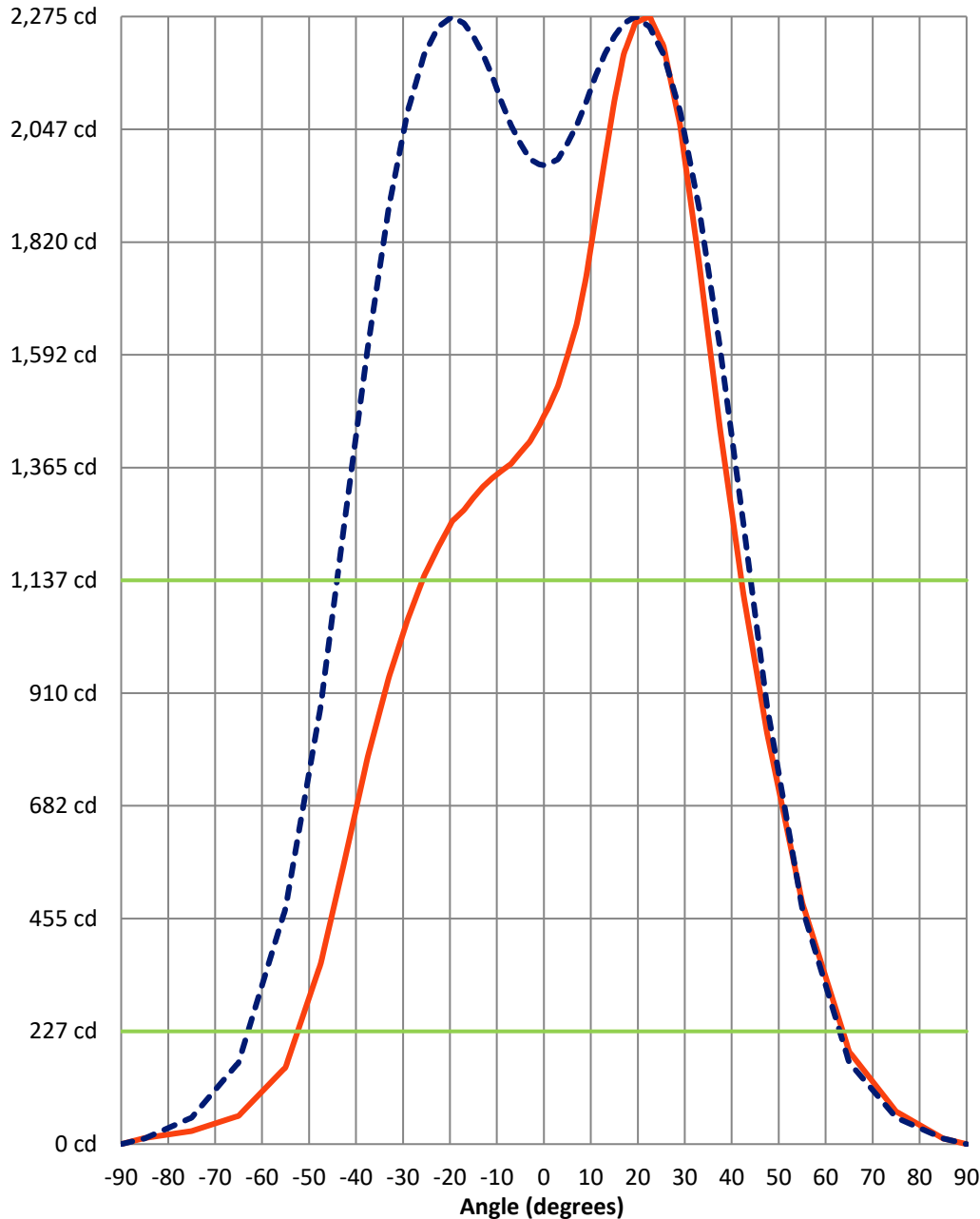
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Luminous Intensity Polar Plot



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Luminous Intensity Plot



Beam:
 H Angle: 88.1°
 V Angle: 67.9°
 Lumens: 2344.5
 Efficiency: 63.1%

Field:
 H Angle: 126°
 V Angle: 116.1°
 Lumens: 3548.6
 Efficiency: 95.5%

Spill:
 Lumens: 167.5
 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	0.9	1.8	5.3	8.8	9.6	10.5	10.5	11.4	11.4	11.4
75°	60.5	59.6	59.6	59.6	60.5	60.5	61.4	63.1	64.0	64.9	65.8
65°	191.2	191.2	189.4	187.7	189.4	192.1	188.5	185.0	188.5	186.8	186.8
55°	522.7	520.0	521.8	519.2	517.4	510.4	510.4	508.6	499.9	492.8	487.6
47.5°	873.4	869.9	877.0	869.9	871.7	860.3	857.7	855.0	853.3	845.4	830.5
42.5°	1140.9	1135.7	1132.1	1128.6	1134.8	1132.1	1130.4	1129.5	1127.8	1126.9	1108.5
37.5°	1386.5	1388.2	1397.9	1402.3	1425.1	1434.7	1441.7	1444.3	1447.0	1450.5	1443.5
33°	1636.4	1635.5	1653.1	1672.4	1701.3	1733.7	1753.0	1760.9	1769.7	1775.8	1782.0
29°	1841.6	1839.0	1859.1	1889.8	1919.7	1966.1	2002.1	2028.4	2051.2	2054.7	2055.6
25.5°	1947.7	1948.6	1960.9	1990.7	2038.0	2083.6	2138.0	2174.0	2197.6	2208.2	2214.3
22.5°	1974.9	1976.7	1987.2	2018.7	2055.6	2102.1	2154.7	2199.4	2234.5	2260.8	2274.8
19.5°	1925.8	1934.6	1945.1	1973.1	2020.5	2066.1	2111.7	2159.1	2202.0	2238.9	2262.5
17°	1870.5	1871.4	1879.3	1899.5	1941.6	1978.4	2021.4	2075.8	2122.2	2166.1	2198.5
15°	1786.4	1789.9	1794.2	1811.8	1846.9	1881.1	1923.2	1972.3	2020.5	2060.0	2103.8
13°	1689.9	1696.0	1692.5	1710.9	1749.5	1776.7	1810.9	1858.3	1901.2	1940.7	1988.1
11°	1582.9	1589.9	1594.3	1611.0	1634.6	1667.1	1699.5	1741.6	1782.0	1824.9	1868.8
9°	1511.9	1515.4	1517.1	1525.9	1546.1	1568.0	1602.2	1635.5	1674.1	1706.6	1749.5
7°	1445.2	1448.7	1448.7	1454.0	1475.0	1489.9	1516.3	1546.1	1575.9	1609.2	1654.8
5°	1395.2	1398.7	1404.9	1413.7	1430.3	1447.0	1465.4	1489.1	1522.4	1547.8	1589.9
3°	1362.8	1364.5	1366.3	1373.3	1386.5	1401.4	1423.3	1443.5	1460.1	1496.1	1529.4
1°	1342.6	1347.0	1345.2	1349.6	1364.5	1373.3	1392.6	1407.5	1424.2	1455.7	1486.4
0°	1333.8	1338.2	1338.2	1343.5	1354.9	1360.2	1376.8	1392.6	1408.4	1440.8	1468.9
-1°	1323.3	1326.0	1330.3	1336.5	1344.4	1351.4	1366.3	1382.1	1395.2	1422.4	1449.6
-3°	1317.2	1317.2	1318.9	1326.8	1333.0	1339.1	1349.6	1362.8	1375.9	1393.5	1417.2
-5°	1309.3	1311.0	1316.3	1320.7	1329.5	1333.0	1339.1	1351.4	1363.7	1380.3	1395.2
-7°	1309.3	1310.2	1313.7	1318.1	1318.9	1326.8	1333.8	1340.9	1349.6	1364.5	1372.4
-9°	1317.2	1318.1	1314.6	1317.2	1321.6	1326.8	1330.3	1334.7	1337.4	1347.0	1358.4
-11°	1304.0	1304.0	1304.0	1300.5	1306.7	1315.4	1318.9	1324.2	1327.7	1333.8	1343.5
-13°	1297.0	1300.5	1297.9	1298.8	1302.3	1305.8	1309.3	1313.7	1311.9	1315.4	1326.0
-15°	1286.5	1289.1	1293.5	1297.9	1301.4	1302.3	1301.4	1302.3	1298.8	1300.5	1304.0
-17°	1277.7	1282.1	1284.7	1285.6	1290.9	1284.7	1283.9	1289.1	1290.9	1284.7	1279.5
-19.5°	1269.0	1269.0	1268.1	1269.8	1270.7	1278.6	1272.5	1266.3	1261.1	1259.3	1256.7
-22.5°	1234.8	1234.8	1228.6	1233.0	1233.9	1234.8	1232.1	1226.9	1219.0	1213.7	1204.1
-25.5°	1189.2	1190.0	1186.5	1186.5	1182.1	1181.3	1178.6	1176.9	1165.5	1157.6	1146.2
-29°	1113.7	1117.2	1112.0	1112.9	1105.0	1099.7	1094.4	1087.4	1079.5	1071.6	1058.5
-33°	983.9	990.1	988.3	986.6	986.6	982.2	970.8	969.0	966.4	959.4	941.8
-37.5°	819.1	823.5	820.0	824.3	822.6	819.1	813.8	806.8	801.5	795.4	781.4
-42.5°	590.2	597.2	596.3	600.7	595.5	591.9	589.3	588.4	586.7	584.9	569.1
-47.5°	368.3	375.3	375.3	371.8	377.1	374.5	370.1	371.0	371.8	367.4	364.8
-55°	147.3	150.0	148.2	149.1	150.8	150.8	151.7	152.6	150.8	154.3	155.2
-65°	50.0	50.9	50.0	51.7	50.9	51.7	51.7	51.7	53.5	54.4	57.0
-75°	18.4	18.4	18.4	18.4	19.3	20.2	21.9	22.8	24.6	25.4	26.3
-85°	1.8	1.8	4.4	8.8	12.3	13.2	13.2	13.2	13.2	13.2	12.3
-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-B20-7-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°	11.4	10.5	11.4	11.4	11.4	10.5	9.6	10.5	10.5	9.6	8.8
75°	65.8	66.6	65.8	64.9	61.4	56.1	49.1	36.0	21.9	12.3	9.6
65°	185.0	185.0	180.7	174.5	164.9	148.2	125.4	85.1	43.0	19.3	10.5
55°	478.8	464.8	444.6	416.6	371.8	316.6	209.6	157.0	68.4	28.1	11.4
47.5°	815.6	795.4	761.2	702.4	619.1	510.4	392.9	220.1	93.8	33.3	11.4
42.5°	1084.8	1060.2	1023.4	939.2	824.3	666.5	498.1	252.6	107.0	39.5	11.4
37.5°	1420.7	1384.7	1326.0	1220.7	1050.6	833.1	614.7	280.6	121.0	43.8	11.4
33°	1753.9	1699.5	1617.1	1483.8	1262.8	987.5	718.2	377.1	137.7	47.4	12.3
29°	2025.8	1964.4	1864.4	1689.9	1439.1	1113.7	796.3	420.1	149.1	50.0	11.4
25.5°	2186.2	2124.9	2012.6	1822.3	1548.7	1198.8	850.6	454.3	158.7	51.7	12.3
22.5°	2253.8	2197.6	2083.6	1890.7	1606.6	1250.5	884.8	476.2	164.9	53.5	11.4
19.5°	2252.9	2207.3	2104.7	1917.9	1642.5	1283.0	913.8	492.8	169.3	54.4	12.3
17°	2196.8	2163.4	2072.2	1901.2	1637.3	1288.2	926.1	504.2	171.9	55.2	11.4
15°	2117.8	2091.5	2014.4	1855.6	1615.4	1283.9	932.2	513.9	173.6	56.1	11.4
13°	2004.7	1999.5	1931.9	1800.4	1575.9	1264.6	935.7	520.0	176.3	56.1	11.4
11°	1890.7	1896.0	1845.1	1728.5	1530.3	1240.9	934.0	520.9	178.0	56.1	11.4
9°	1781.1	1798.6	1760.0	1656.6	1483.8	1221.6	924.3	524.4	179.8	56.1	11.4
7°	1693.4	1720.6	1678.5	1600.4	1438.2	1196.2	919.0	527.9	178.9	57.0	11.4
5°	1623.2	1646.0	1626.8	1551.3	1398.7	1171.6	913.8	526.2	178.9	57.0	11.4
3°	1568.0	1589.9	1572.4	1494.3	1364.5	1154.9	903.3	524.4	180.7	57.0	11.4
1°	1519.8	1539.9	1530.3	1449.6	1336.5	1132.1	889.2	521.8	180.7	57.0	11.4
0°	1496.1	1515.4	1511.0	1434.7	1319.8	1119.0	884.0	518.3	179.8	57.0	11.4
-1°	1476.8	1497.0	1490.8	1420.7	1304.0	1109.3	878.7	515.6	179.8	57.0	11.4
-3°	1440.0	1463.6	1459.3	1397.9	1281.2	1097.1	865.6	510.4	178.0	57.0	11.4
-5°	1418.0	1445.2	1434.7	1375.9	1258.4	1076.0	857.7	505.1	176.3	56.1	11.4
-7°	1396.1	1415.4	1409.3	1344.4	1233.9	1050.6	838.4	499.0	173.6	55.2	11.4
-9°	1369.8	1387.3	1383.8	1319.8	1206.7	1033.1	822.6	488.5	171.0	55.2	11.4
-11°	1357.5	1365.4	1354.9	1299.6	1183.9	1012.0	805.0	477.9	167.5	54.4	11.4
-13°	1333.8	1338.2	1327.7	1277.7	1156.7	984.8	784.9	464.8	164.0	53.5	11.4
-15°	1308.4	1311.0	1300.5	1245.3	1130.4	962.0	763.8	450.8	160.5	52.6	11.4
-17°	1281.2	1280.4	1264.6	1202.3	1097.1	931.3	737.5	436.7	157.0	51.7	10.5
-19.5°	1248.8	1241.8	1219.0	1156.7	1050.6	890.1	702.4	416.6	150.8	50.9	11.4
-22.5°	1192.7	1179.5	1150.6	1090.1	984.8	835.7	660.3	388.5	142.9	49.1	10.5
-25.5°	1127.8	1105.8	1071.6	1013.8	913.8	776.1	611.2	354.3	135.9	47.4	11.4
-29°	1033.9	1008.5	972.5	919.0	834.9	699.8	548.1	316.6	124.5	45.6	11.4
-33°	919.9	893.6	855.0	802.4	725.2	613.0	474.4	271.0	111.4	42.1	11.4
-37.5°	758.6	735.8	704.2	662.1	593.7	499.0	388.5	205.2	96.5	38.6	11.4
-42.5°	558.6	542.0	525.3	489.3	444.6	373.6	263.1	177.1	83.3	34.2	11.4
-47.5°	360.4	354.3	345.5	328.0	301.7	247.3	196.4	139.4	71.0	29.8	11.4
-55°	158.7	161.4	161.4	161.4	157.9	148.2	130.7	94.7	50.9	24.6	10.5
-65°	59.6	61.4	64.0	66.6	68.4	68.4	64.0	51.7	32.4	17.5	9.6
-75°	27.2	28.1	28.1	28.9	29.8	28.9	28.1	24.6	17.5	12.3	9.6
-85°	12.3	11.4	11.4	11.4	10.5	10.5	10.5	10.5	10.5	9.6	8.8
-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)