

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: LUMARK

Report Number: P961945

Luminaire Tested: **NAV-SB2B-735-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961945
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-735-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11520 lumens
Efficiency: N/A
Efficacy: 155.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 73.9
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: 24 FT

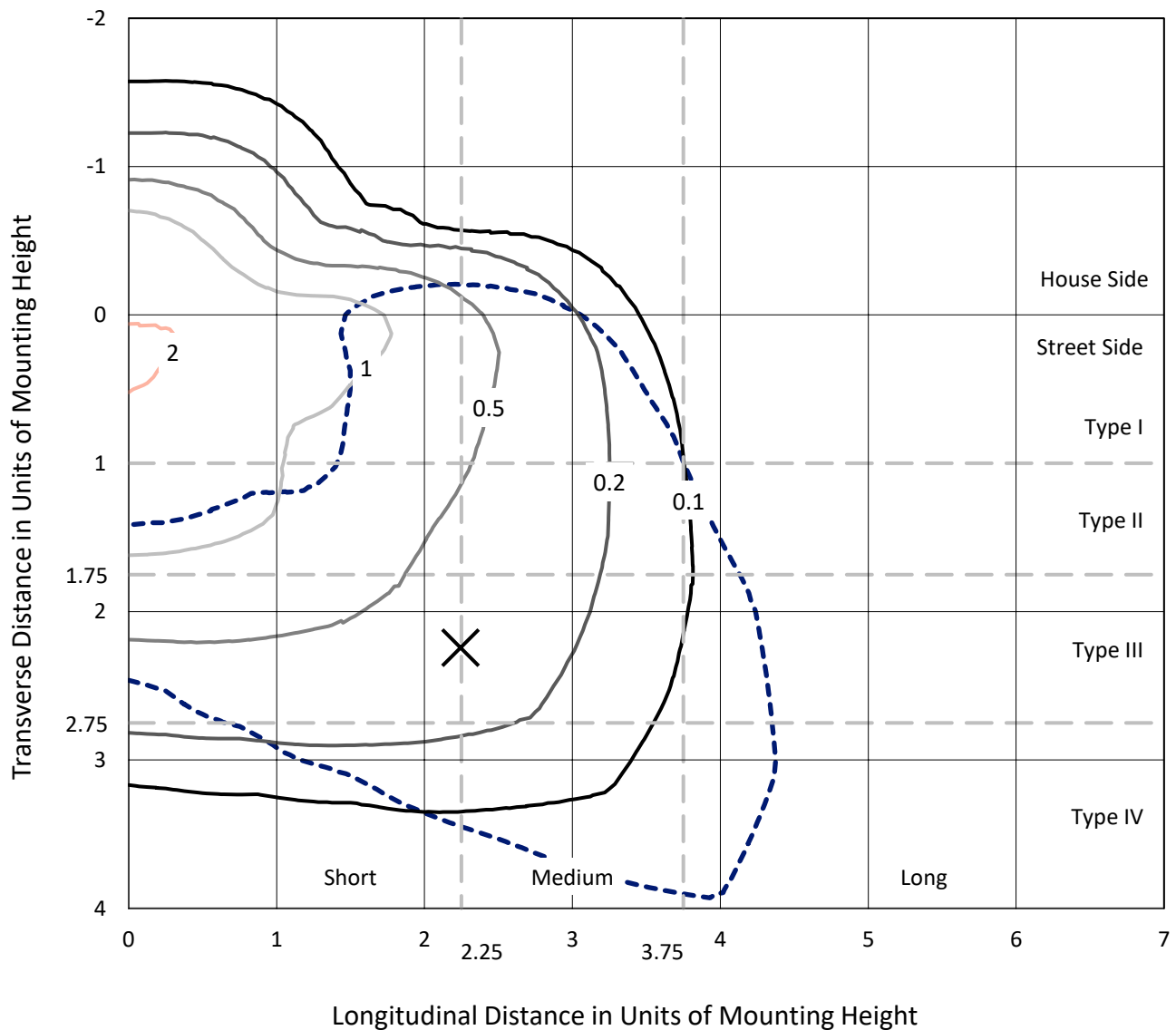


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

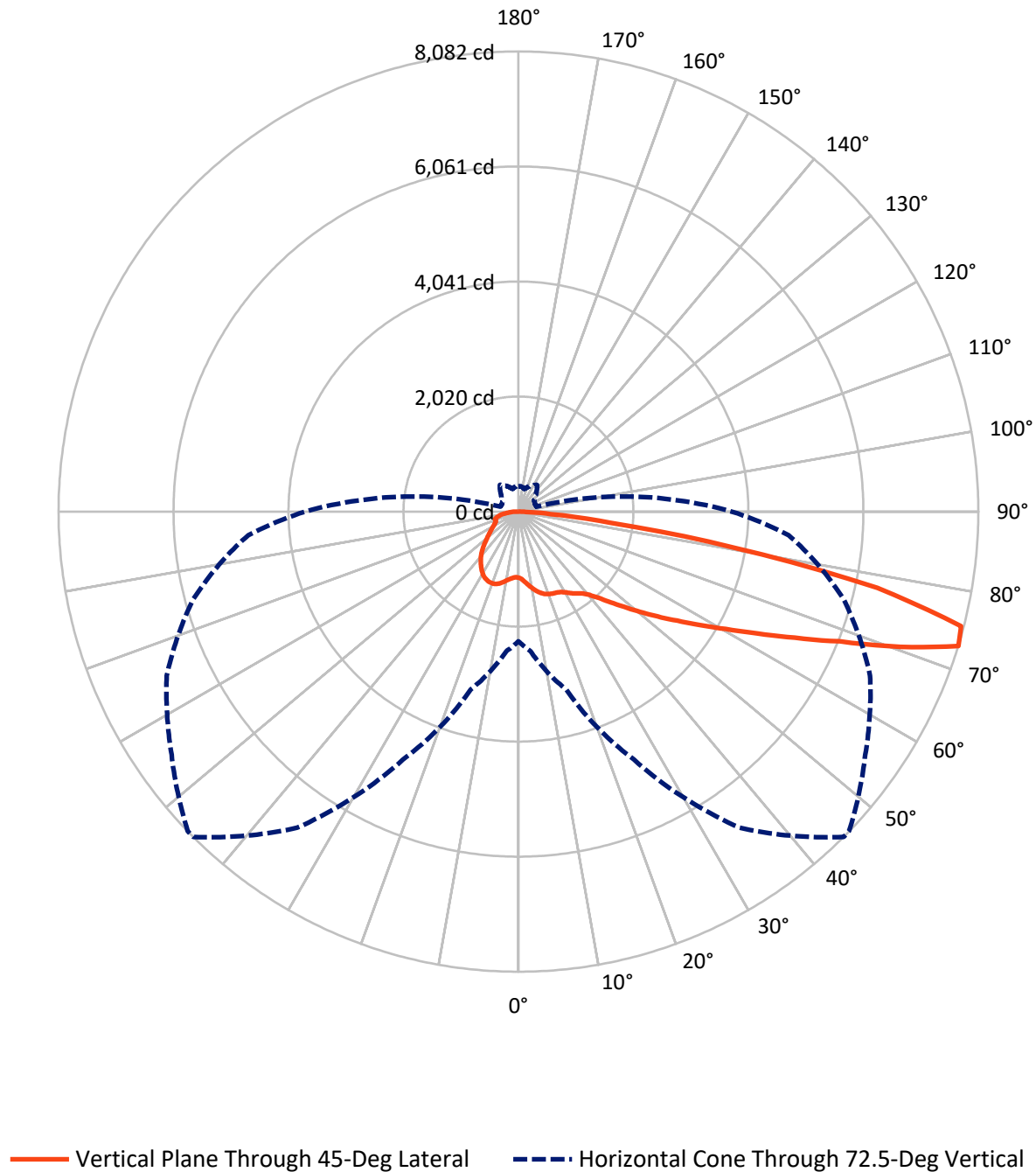


Based on 25 foot mounting height. Maximum calculated value = 2.3 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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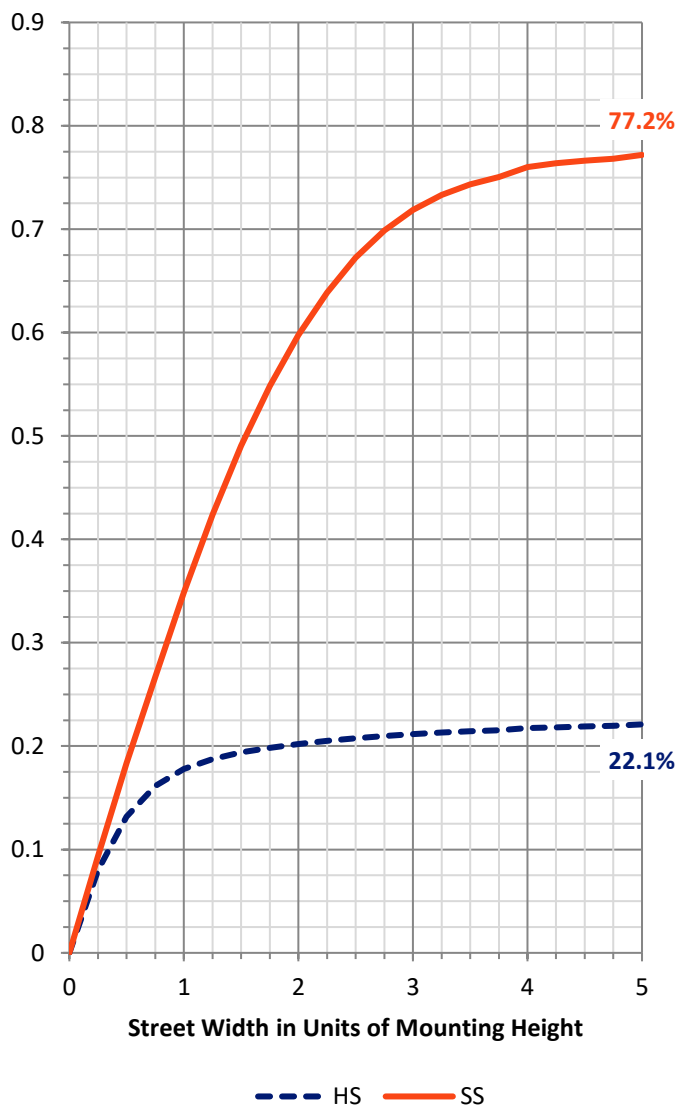
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2604.3	0.0	2604.3
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	8915.7	0.0	8915.7
	% Fixture	77.4	0.0	77.4
Total	Lumens	11520.0	0.0	11520.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.3	1.0
10°-20°	394.4	3.4
20°-30°	686.0	6.0
30°-40°	983.5	8.5
40°-50°	1384.8	12.0
50°-60°	2121.1	18.4
60°-70°	3072.7	26.7
70°-80°	2453.7	21.3
80°-90°	305.6	2.7
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°	11520.0	100.0
0°-180°	11520.0	100.0

Coefficient of Utilization



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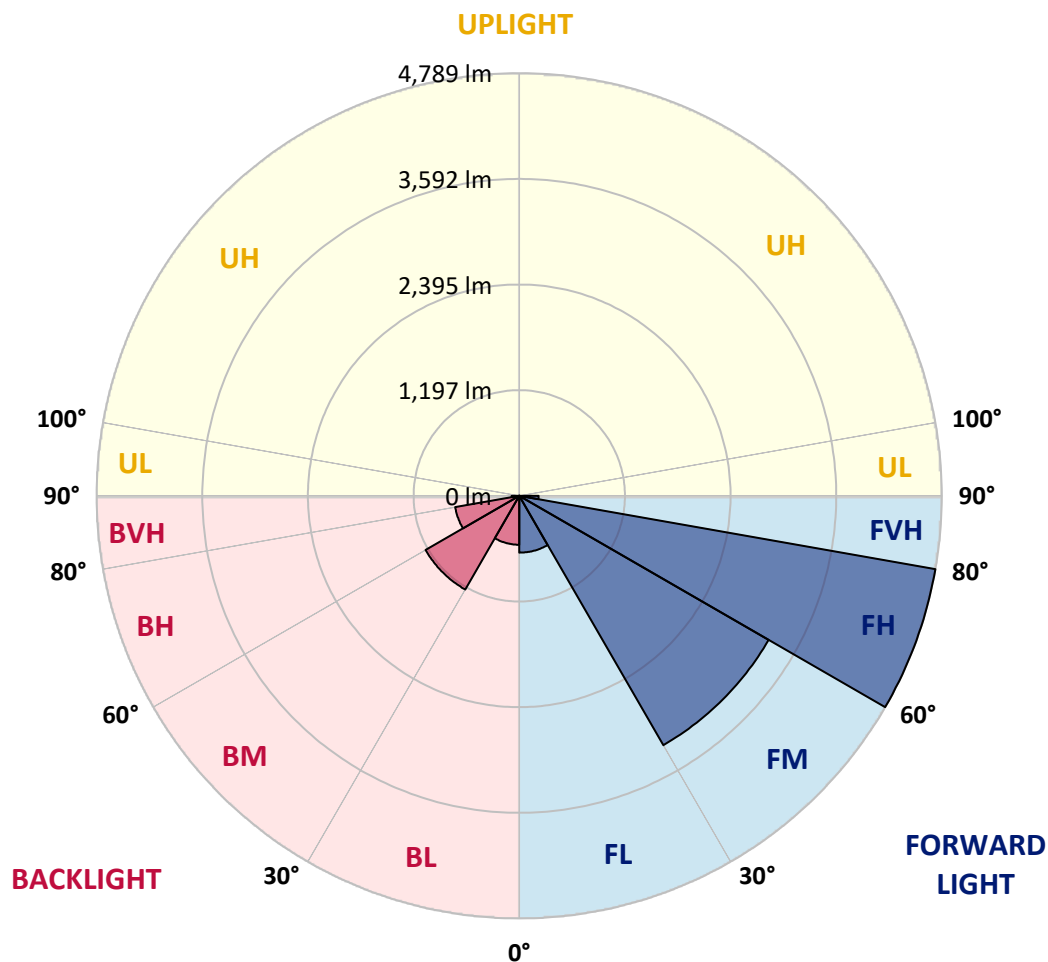
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	644.2	5.6			
FM	(30°-60°)	3263.1	28.3			
FH	(60°-80°)	4789.2	41.6			G2/5000
FVH	(80°-90°)	219.2	1.9			G2/225
BL	(0°-30°)	554.5	4.8	B2/1000		
BM	(30°-60°)	1226.2	10.6	B2/2500		
BH	(60°-80°)	737.2	6.4	B2/1000		G2/1000
BVH	(80°-90°)	86.4	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1162.1	1162.1	1162.1	1162.1	1162.1	1162.1	1162.1	1162.1	1162.1	1162.1	1162.1
2.5°	1207.7	1215.5	1208.3	1201.6	1198.5	1190.6	1190.0	1185.2	1182.1	1173.6	1171.3
5°	1292.0	1302.4	1290.2	1276.8	1264.7	1245.3	1242.8	1228.9	1213.1	1194.9	1184.6
7.5°	1387.3	1396.4	1382.4	1362.4	1341.2	1309.0	1308.4	1282.9	1258.0	1227.0	1209.5
10°	1470.5	1482.6	1463.8	1436.4	1409.8	1373.3	1369.1	1340.0	1308.4	1268.3	1241.7
12.5°	1543.9	1552.4	1534.1	1500.8	1469.8	1433.4	1427.9	1395.7	1360.6	1315.1	1281.0
15°	1602.1	1613.0	1588.7	1553.0	1520.2	1484.4	1479.5	1450.4	1415.2	1367.2	1323.6
17.5°	1640.3	1649.4	1624.5	1584.5	1553.0	1523.3	1519.6	1495.3	1464.3	1415.8	1369.1
20°	1654.9	1664.6	1638.6	1597.9	1568.8	1545.7	1543.9	1526.2	1505.0	1460.7	1413.4
22.5°	1669.5	1678.5	1644.6	1602.1	1576.7	1562.1	1561.5	1549.9	1541.4	1505.0	1458.9
25°	1728.4	1730.8	1685.3	1624.0	1587.5	1574.8	1574.2	1573.6	1577.3	1548.7	1508.1
27.5°	1779.3	1778.7	1739.8	1682.2	1625.8	1599.1	1598.5	1604.5	1616.1	1592.4	1559.0
30°	1853.9	1847.3	1801.1	1741.1	1689.5	1648.2	1644.6	1639.2	1648.2	1629.4	1610.0
32.5°	2012.4	1991.2	1916.4	1809.6	1742.3	1710.7	1705.9	1671.9	1675.6	1664.0	1654.4
35°	2239.3	2211.4	2111.9	1939.5	1807.8	1762.9	1760.5	1717.4	1710.1	1699.9	1703.4
37.5°	2509.4	2474.8	2358.8	2127.7	1920.7	1823.6	1820.0	1781.1	1751.4	1740.4	1761.2
40°	2780.6	2737.0	2641.0	2357.1	2087.0	1925.0	1913.5	1854.5	1820.6	1802.4	1846.0
42.5°	3044.0	3007.7	2925.7	2614.4	2292.1	2073.1	2047.5	1946.8	1921.4	1904.3	1983.3
45°	3277.0	3244.3	3184.2	2889.3	2532.5	2274.5	2249.7	2085.2	2077.3	2077.3	2191.3
47.5°	3466.4	3459.1	3395.4	3169.6	2815.9	2503.9	2460.8	2277.5	2298.8	2331.6	2487.0
50°	3676.4	3656.4	3588.4	3445.7	3149.0	2766.7	2731.5	2513.6	2593.1	2682.9	2914.2
52.5°	3869.4	3880.2	3804.4	3733.5	3525.3	3059.8	2997.9	2792.2	2963.9	3112.6	3414.8
55°	4067.8	4068.4	4047.2	4037.5	3919.7	3383.8	3315.9	3127.2	3400.2	3584.7	3998.6
57.5°	4254.1	4255.3	4286.9	4372.4	4377.3	3757.6	3680.6	3538.6	3885.2	4073.2	4600.6
60°	4420.4	4428.9	4515.0	4715.3	4779.7	4186.1	4113.3	4024.7	4386.4	4575.7	5233.5
62.5°	4476.2	4507.1	4698.9	4983.5	5177.2	4711.7	4640.1	4587.3	4913.1	5089.1	5762.8
65°	4381.6	4452.5	4823.3	5205.1	5586.1	5336.2	5265.1	5207.5	5460.6	5626.2	6197.3
67.5°	4149.1	4240.7	4816.1	5437.5	6082.6	6087.5	6021.3	5886.0	6047.4	6111.2	6338.7
70°	3536.8	3673.9	4391.8	5524.2	6652.5	7114.8	7051.2	6702.8	6633.0	6324.8	5940.6
72.5°	2278.8	2463.3	3234.0	4810.0	6779.2	8081.6	8077.9	7440.2	6818.1	5909.6	4764.5
75°	831.4	944.2	1502.5	3019.1	5690.6	8032.4	8056.1	7313.9	6224.0	4564.8	2968.2
77.5°	302.8	331.4	490.4	1160.3	3499.8	6444.9	6494.0	5847.1	4430.0	2290.9	1176.1
80°	159.0	174.8	251.2	450.3	1499.6	3827.5	3904.5	3474.9	2082.2	690.0	352.6
82.5°	87.9	95.3	140.8	244.6	675.5	1636.7	1682.8	1372.7	732.5	292.5	145.7
85°	47.4	50.3	66.1	133.6	330.2	567.4	580.2	410.2	291.9	171.8	70.4
87.5°	13.9	17.0	21.8	42.4	129.3	127.4	130.5	81.3	115.3	86.8	23.1
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°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1162.1	1162.1	1162.1	1162.1	1162.1	1162.1	1162.1	1162.1	1162.1	1162.1	1162.1
2.5°	1167.6	1165.7	1159.1	1156.1	1152.4	1151.8	1154.9	1155.5	1156.1	1156.7	1159.1
5°	1178.5	1172.5	1166.3	1162.8	1164.0	1164.6	1170.7	1174.9	1177.9	1180.4	1181.5
7.5°	1199.8	1194.9	1184.6	1184.0	1185.8	1191.3	1199.1	1208.9	1214.3	1218.6	1219.8
10°	1231.3	1222.2	1210.1	1211.9	1215.5	1223.4	1239.8	1247.7	1256.9	1264.7	1262.9
12.5°	1263.5	1255.6	1241.7	1242.8	1249.0	1262.9	1278.7	1288.3	1294.5	1300.5	1303.0
15°	1305.3	1291.4	1276.2	1276.2	1287.2	1302.4	1309.6	1317.5	1321.1	1327.8	1330.2
17.5°	1348.5	1330.2	1310.3	1309.0	1322.4	1329.6	1333.8	1335.1	1336.3	1343.6	1346.0
20°	1391.5	1371.6	1343.0	1340.6	1343.6	1342.3	1341.7	1340.6	1342.3	1351.5	1355.2
22.5°	1434.0	1410.9	1371.6	1360.6	1352.1	1340.6	1340.0	1339.4	1340.6	1349.6	1355.8
25°	1483.8	1455.9	1403.0	1370.3	1341.7	1326.0	1327.8	1328.4	1329.6	1336.9	1346.6
27.5°	1537.8	1506.9	1432.2	1367.2	1315.7	1304.7	1301.8	1303.5	1307.8	1319.3	1330.9
30°	1591.8	1555.4	1458.9	1355.2	1282.9	1267.7	1258.0	1262.3	1275.6	1287.2	1299.9
32.5°	1640.9	1604.5	1480.1	1328.4	1241.1	1217.4	1204.6	1210.1	1223.4	1227.6	1242.8
35°	1698.6	1657.3	1489.2	1286.0	1195.6	1159.1	1142.2	1134.3	1140.9	1136.6	1150.0
37.5°	1762.9	1719.8	1488.0	1230.1	1142.2	1100.2	1076.6	1046.8	1032.9	1018.3	1027.5
40°	1858.2	1796.3	1473.4	1162.8	1075.9	1037.7	995.3	944.8	913.4	884.8	886.6
42.5°	1988.1	1902.5	1446.8	1088.8	1001.3	965.6	907.8	849.0	799.2	751.9	747.6
45°	2181.7	2041.5	1413.4	1009.8	920.7	885.4	822.9	756.8	700.3	639.6	632.3
47.5°	2460.8	2228.4	1381.8	920.0	835.7	803.5	747.0	685.7	619.0	560.2	553.5
50°	2844.4	2496.6	1352.7	832.6	751.9	727.6	682.8	620.2	552.9	505.5	502.5
52.5°	3332.3	2861.4	1340.6	748.2	673.6	664.5	628.7	570.4	506.8	466.7	463.6
55°	3892.4	3297.7	1340.6	667.6	605.1	608.0	583.2	529.2	474.0	438.2	434.5
57.5°	4464.1	3739.5	1316.3	592.9	546.7	559.5	543.8	496.4	446.7	409.6	403.5
60°	4990.8	4109.6	1218.0	524.9	495.2	515.3	504.9	464.2	403.5	372.6	367.8
62.5°	5395.6	4318.4	1028.6	470.9	452.7	475.8	470.3	421.8	395.6	382.9	378.6
65°	5598.3	4284.4	786.5	423.0	416.9	452.7	441.2	439.4	418.7	404.2	399.3
67.5°	5473.9	3992.0	570.4	387.8	396.3	431.5	475.8	483.1	444.8	416.4	411.4
70°	4928.3	3462.8	424.8	354.4	370.2	432.0	542.5	505.5	436.3	402.9	397.5
72.5°	3749.2	2582.2	329.5	319.2	336.2	435.1	572.3	495.2	412.0	445.5	441.8
75°	2144.1	1417.7	264.6	276.1	293.8	406.6	557.1	468.5	393.3	409.0	409.0
77.5°	817.4	545.0	218.4	233.6	236.1	355.1	532.8	466.7	374.4	365.3	333.1
80°	283.4	213.0	180.8	185.7	182.7	315.6	511.0	406.0	306.5	274.3	265.2
82.5°	115.9	106.2	143.2	137.1	129.9	245.2	412.7	332.0	250.6	221.5	219.0
85°	50.3	67.3	94.7	83.1	75.2	169.9	330.8	281.0	211.8	182.7	182.0
87.5°	10.4	25.5	40.1	37.6	38.8	113.5	234.8	199.7	149.9	112.2	87.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)