

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: P961448

Luminaire Tested: **NAV-SB2A-740-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961448
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-740-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7493.8 lumens
Efficiency: N/A
Efficacy: 130.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

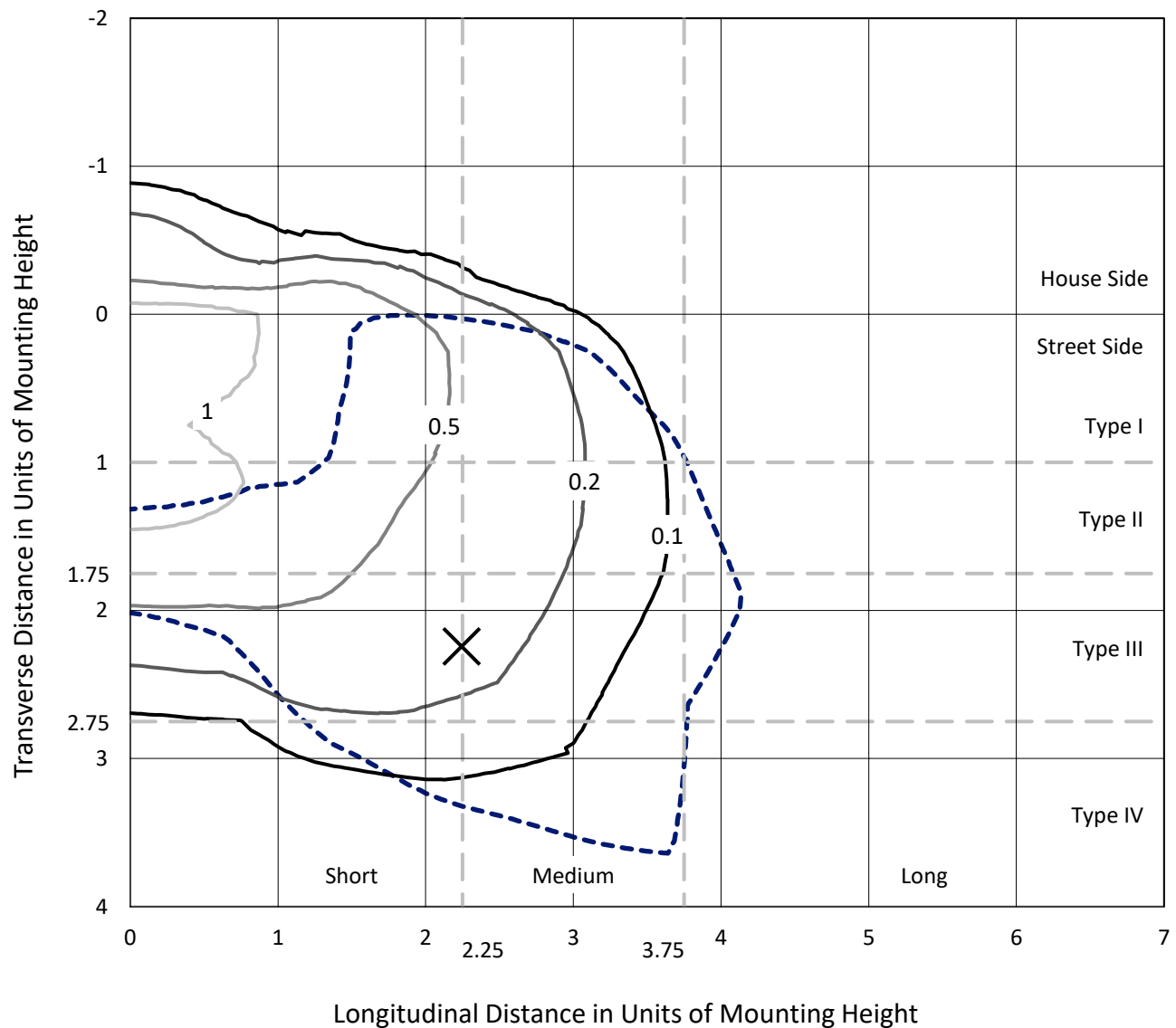
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

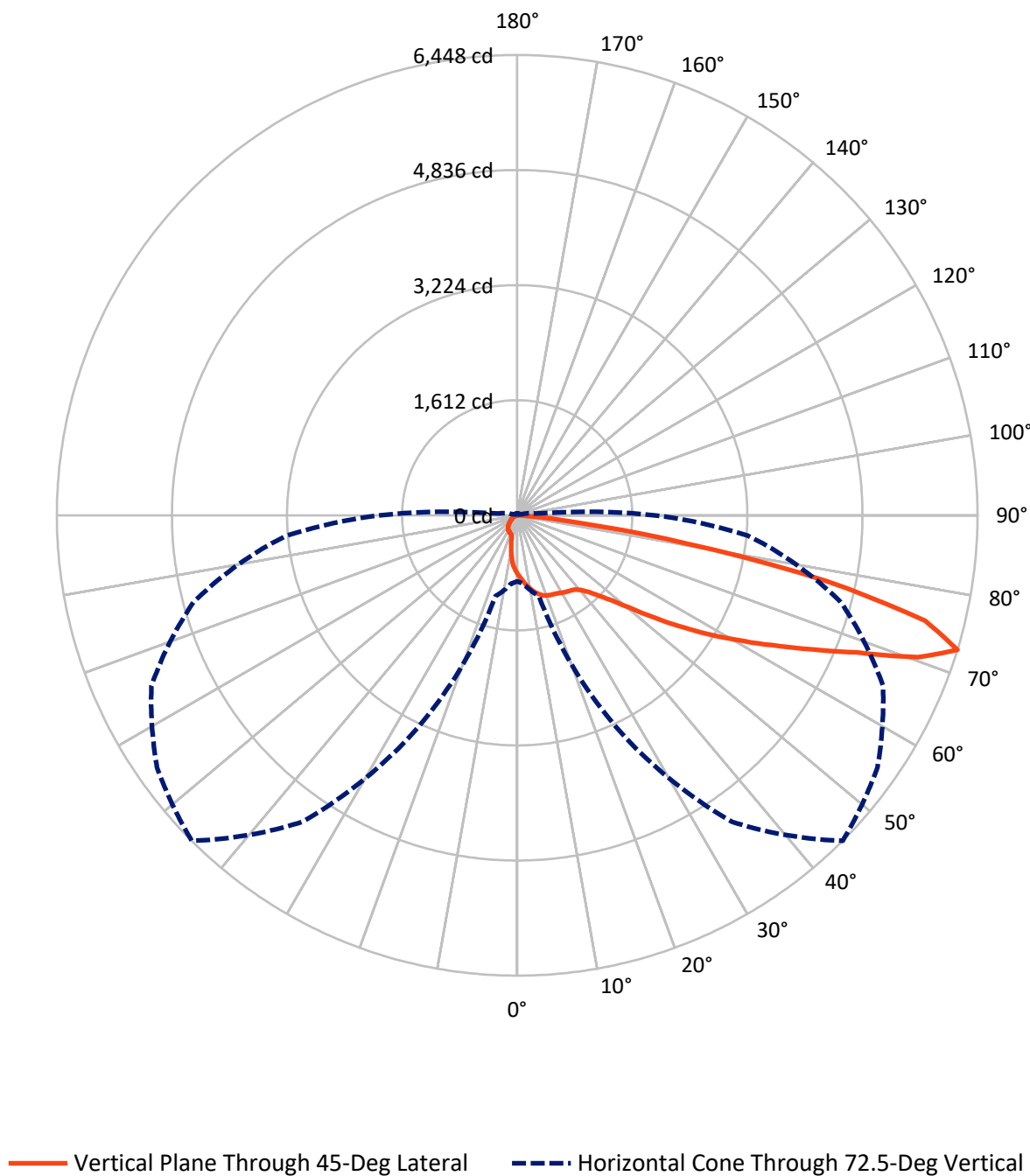
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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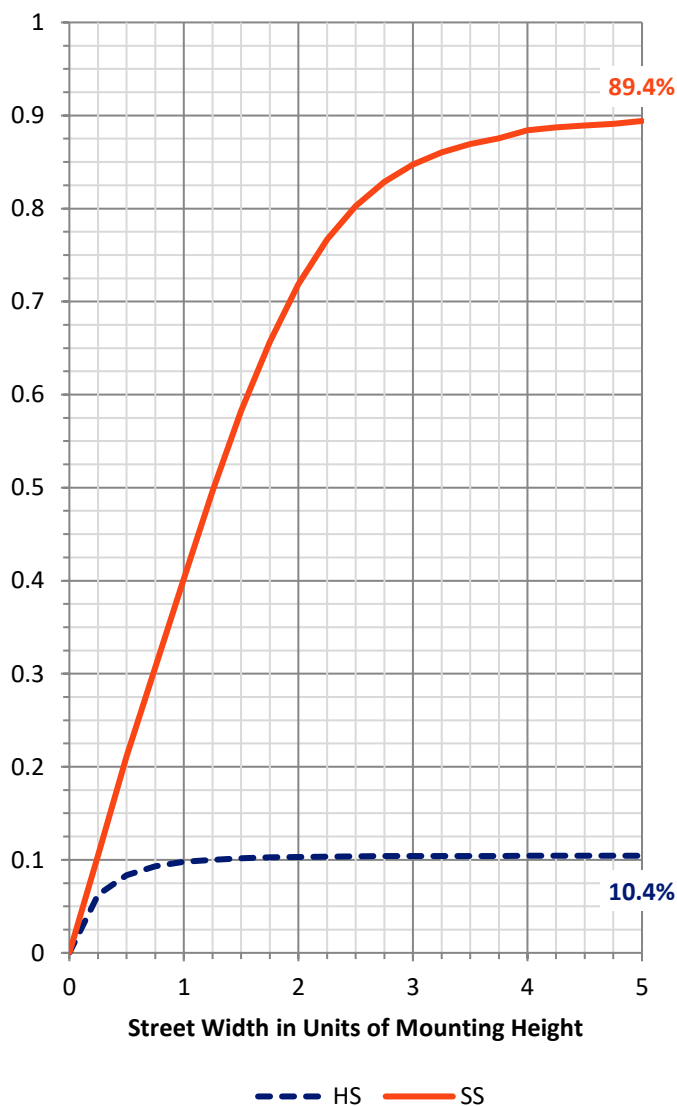
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	787.4	0.0	787.4
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	6706.4	0.0	6706.4
	% Fixture	89.5	0.0	89.5
Total	Lumens	7493.8	0.0	7493.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.3	1.0
10°-20°	226.1	3.0
20°-30°	371.2	5.0
30°-40°	526.5	7.0
40°-50°	870.2	11.6
50°-60°	1563.3	20.9
60°-70°	2170.7	29.0
70°-80°	1574.6	21.0
80°-90°	113.8	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°	7493.8	100.0
0°-180°	7493.8	100.0

Coefficient of Utilization



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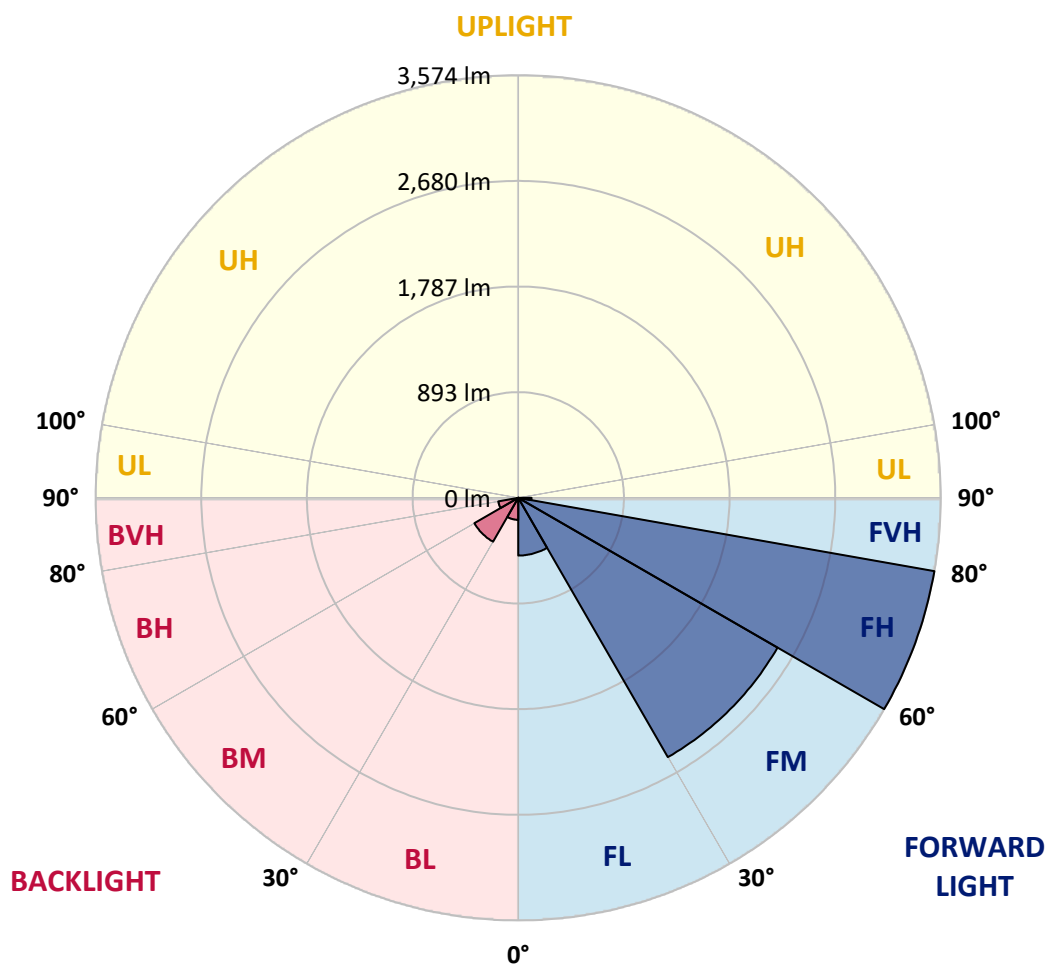
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	488.1	6.5			
FM	(30°-60°)	2531.8	33.8			
FH	(60°-80°)	3573.6	47.7			G2/5000
FVH	(80°-90°)	112.9	1.5			G2/225
BL	(0°-30°)	186.5	2.5	B1/500		
BM	(30°-60°)	428.2	5.7	B1/1000		
BH	(60°-80°)	171.7	2.3	B1/500		G1/500
BVH	(80°-90°)	1.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	820.9	820.9	820.9	820.9	820.9	820.9	820.9	820.9	820.9	820.9	820.9
2.5°	896.7	898.2	897.2	891.0	880.8	875.1	872.1	861.9	855.3	843.5	831.2
5°	979.0	985.1	981.5	969.3	949.9	936.0	931.9	911.0	892.1	870.0	844.5
7.5°	1066.5	1069.6	1062.9	1047.0	1021.0	997.4	993.8	964.7	934.5	900.8	865.9
10°	1142.2	1145.7	1135.5	1112.5	1082.8	1053.7	1048.6	1016.4	980.5	939.1	894.6
12.5°	1205.6	1209.2	1195.9	1168.3	1135.5	1105.4	1100.2	1066.5	1027.0	981.0	925.8
15°	1253.7	1260.3	1242.4	1212.8	1177.5	1147.3	1144.7	1111.5	1073.2	1022.0	963.2
17.5°	1281.9	1288.4	1271.6	1235.7	1205.6	1180.1	1177.0	1149.3	1113.6	1064.5	999.5
20°	1286.4	1292.5	1274.7	1243.4	1218.4	1197.9	1196.4	1176.5	1150.4	1103.3	1038.8
22.5°	1272.6	1280.3	1263.9	1238.8	1221.5	1210.7	1208.7	1197.4	1182.5	1142.7	1075.7
25°	1258.3	1264.4	1252.1	1230.2	1221.0	1220.0	1221.5	1219.4	1216.4	1182.5	1118.7
27.5°	1257.3	1263.9	1250.1	1229.2	1224.1	1234.7	1236.3	1246.0	1248.6	1218.9	1160.1
30°	1266.0	1270.6	1257.3	1235.2	1232.8	1257.3	1257.8	1275.2	1279.3	1249.6	1201.0
32.5°	1284.9	1290.0	1276.7	1244.5	1240.9	1275.2	1276.7	1299.7	1306.4	1282.4	1243.9
35°	1329.4	1335.6	1320.2	1270.1	1257.3	1292.0	1296.6	1323.8	1337.1	1317.1	1288.4
37.5°	1440.4	1422.5	1401.5	1321.7	1294.6	1318.7	1326.4	1358.0	1381.6	1358.5	1341.6
40°	1716.1	1659.8	1594.4	1409.7	1360.1	1375.4	1381.6	1413.3	1445.5	1423.0	1414.8
42.5°	2129.8	2063.4	1958.1	1612.2	1458.8	1466.5	1471.1	1498.7	1544.3	1526.3	1528.4
45°	2498.6	2474.7	2367.2	1958.1	1643.5	1605.6	1611.2	1625.5	1692.6	1685.9	1699.2
47.5°	2782.1	2768.2	2685.4	2354.9	1955.5	1775.9	1791.8	1798.5	1895.1	1918.6	1954.5
50°	3000.0	2994.8	2920.6	2707.8	2363.1	2027.0	2032.7	2018.4	2163.2	2221.5	2289.4
52.5°	3205.6	3223.0	3168.3	3035.7	2798.5	2356.0	2354.9	2287.4	2482.9	2570.8	2686.9
55°	3391.2	3397.4	3403.0	3370.3	3236.2	2730.4	2720.7	2610.2	2853.7	2944.7	3070.5
57.5°	3565.7	3568.2	3618.4	3685.4	3692.0	3132.4	3114.6	2982.0	3258.8	3323.8	3401.0
60°	3682.8	3694.6	3800.5	3986.6	4067.9	3547.2	3537.6	3402.5	3671.0	3701.2	3686.9
62.5°	3514.0	3585.7	3852.7	4222.0	4423.0	4007.1	4002.5	3875.6	4104.8	4080.2	3957.5
65°	2844.5	2965.6	3435.3	4381.1	4771.3	4520.7	4527.3	4392.2	4550.3	4470.5	4177.4
67.5°	1989.7	2117.6	2673.1	4393.8	5160.6	5123.7	5162.1	4950.3	5023.4	4844.5	4229.6
70°	1376.0	1442.0	1803.6	4118.7	5463.9	5954.4	5953.4	5635.8	5494.0	5014.7	3963.6
72.5°	925.3	959.6	1171.4	3267.5	5240.8	6448.0	6418.3	6159.5	5652.6	4690.0	3238.3
75°	390.3	415.3	542.2	1836.3	4146.2	5899.2	5818.8	5443.4	5022.4	3693.1	2020.4
77.5°	123.8	134.5	213.8	657.2	2283.8	4434.3	4349.3	3399.4	3366.2	1852.7	738.6
80°	58.8	68.6	120.2	263.9	898.7	2411.7	2399.9	1542.2	1448.0	500.2	148.3
82.5°	25.6	30.1	66.5	141.1	402.0	860.4	877.7	524.8	434.3	189.7	45.5
85°	8.2	10.8	30.6	65.0	169.8	213.8	211.3	124.8	175.0	103.3	15.9
87.5°	0.0	0.0	10.2	14.9	17.4	12.3	13.8	10.8	48.6	28.6	5.6
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°	820.9	820.9	820.9	820.9	820.9	820.9	820.9	820.9	820.9	820.9	820.9
2.5°	825.0	816.8	802.6	789.2	777.5	765.7	758.6	748.4	747.3	747.3	749.9
5°	830.7	817.3	791.8	764.6	733.5	703.9	674.1	645.5	636.3	629.7	632.7
7.5°	847.1	826.0	785.7	734.0	674.7	609.7	564.2	515.1	496.2	486.0	487.5
10°	870.5	841.9	780.5	690.0	593.9	505.3	440.4	387.2	366.7	358.0	358.0
12.5°	896.7	861.4	771.3	635.3	505.3	399.4	336.1	311.5	308.4	308.4	308.4
15°	927.8	884.9	755.5	570.8	412.8	316.1	293.6	294.6	297.7	299.7	299.7
17.5°	960.1	910.0	730.4	498.7	331.0	284.4	285.0	286.5	288.9	291.0	291.0
20°	994.9	935.0	697.2	422.0	283.9	275.2	276.8	278.3	280.3	281.4	281.9
22.5°	1032.2	958.6	657.7	346.8	268.0	267.5	268.0	269.6	272.1	272.1	273.2
25°	1072.1	984.6	612.7	292.0	259.8	259.8	260.9	261.9	263.9	263.9	264.4
27.5°	1113.0	1008.7	565.2	263.4	252.7	252.2	252.2	253.7	254.7	255.2	255.7
30°	1158.0	1036.8	517.6	257.3	247.0	244.5	242.9	244.0	245.0	245.5	246.5
32.5°	1204.1	1063.9	475.2	259.8	241.4	236.8	231.8	230.7	230.7	232.8	234.3
35°	1255.2	1093.6	442.5	268.5	238.3	225.6	217.4	212.8	213.3	216.4	217.9
37.5°	1316.6	1129.3	418.4	276.2	236.3	212.8	199.5	193.8	190.2	193.8	192.8
40°	1396.9	1182.0	401.0	282.4	233.8	197.9	180.1	170.9	164.2	166.3	165.2
42.5°	1515.1	1265.0	394.3	282.9	228.2	180.6	160.1	147.8	138.1	138.6	136.5
45°	1680.8	1395.8	428.7	276.2	215.9	161.6	139.1	122.8	116.6	115.1	113.1
47.5°	1907.9	1586.7	507.9	262.4	197.9	143.2	118.7	104.9	100.2	97.7	96.1
50°	2212.3	1831.7	595.9	247.0	180.1	125.9	101.8	93.1	90.0	87.4	86.9
52.5°	2565.2	2080.2	668.0	231.8	162.2	110.5	91.0	85.9	83.3	81.3	80.8
55°	2889.0	2251.6	663.9	215.4	144.7	98.2	83.3	80.3	77.3	75.2	74.2
57.5°	3090.5	2275.7	547.3	197.4	124.8	88.5	76.3	74.2	70.6	68.1	67.5
60°	3183.0	2138.6	383.7	173.9	104.9	79.2	68.6	67.5	62.9	59.3	58.3
62.5°	3199.9	1883.8	255.7	144.7	87.4	70.6	60.9	59.3	53.2	47.0	44.0
65°	3131.4	1519.7	177.0	113.1	74.7	61.4	52.2	49.1	42.4	36.3	34.2
67.5°	2914.5	1067.0	123.3	81.3	63.4	48.6	41.4	40.4	35.3	30.1	28.6
70°	2517.1	608.1	82.3	60.9	50.1	33.2	32.7	33.7	28.6	24.6	22.5
72.5°	1929.9	278.3	51.1	44.5	34.2	22.5	26.1	26.5	22.0	18.4	16.4
75°	1136.0	119.2	32.2	28.6	17.4	14.9	19.0	19.5	14.9	11.8	10.2
77.5°	386.7	45.0	20.5	16.9	8.7	8.2	12.3	12.3	8.2	4.6	3.6
80°	87.9	16.9	10.2	6.7	4.1	3.6	4.1	3.6	2.0	0.5	0.0
82.5°	25.1	6.7	4.1	2.6	1.5	1.5	0.5	0.0	0.0	0.0	0.0
85°	7.2	3.1	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.1	0.5	0.0	0.0	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	0.0	0.0	0.0	0.0

(END OF REPORT)