

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: P960363

Luminaire Tested: **NAV-SB1C-735-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960363
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-SB1C-735-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV WIDE OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5915.3 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

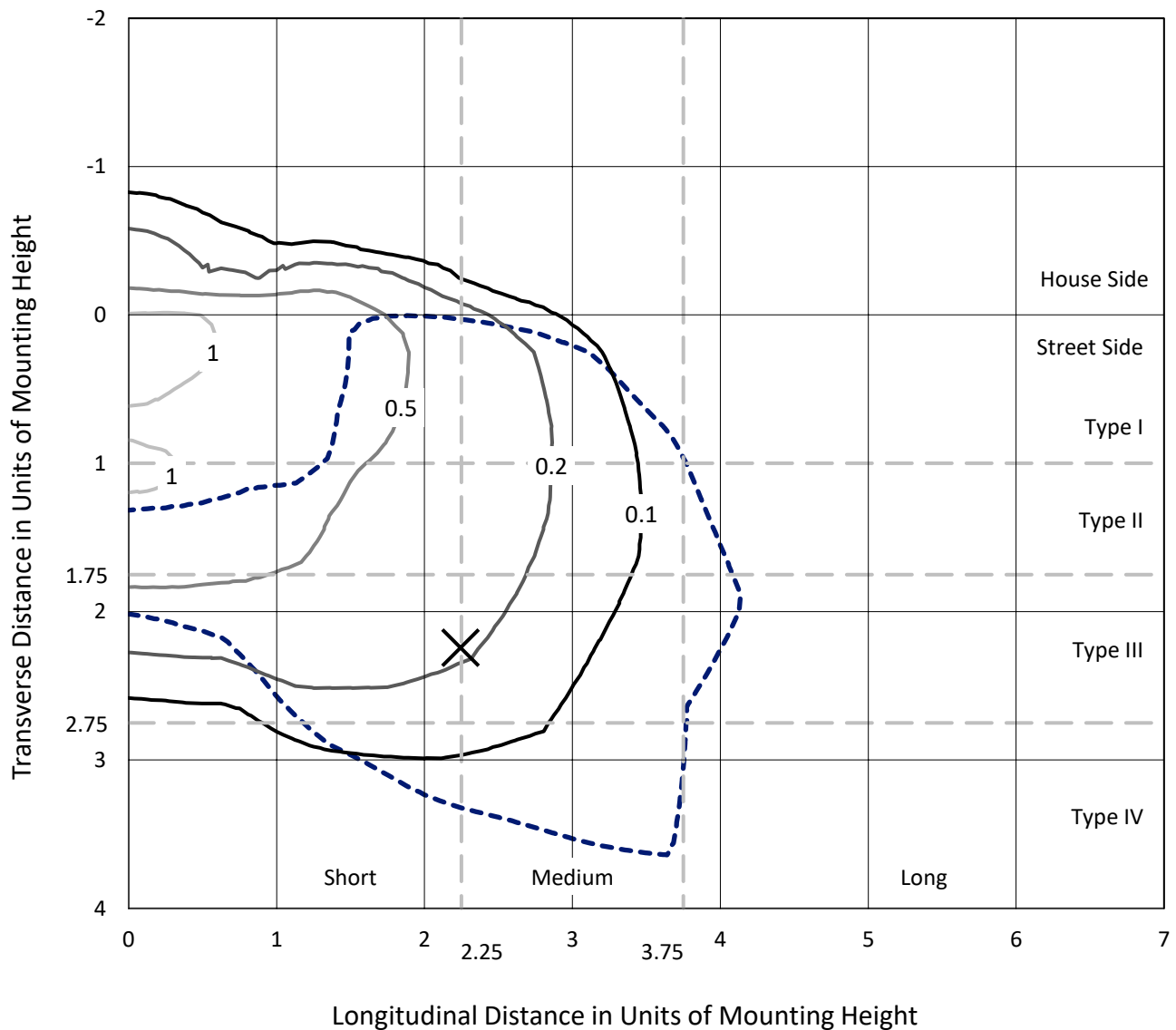
Input Watts (W): 54.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

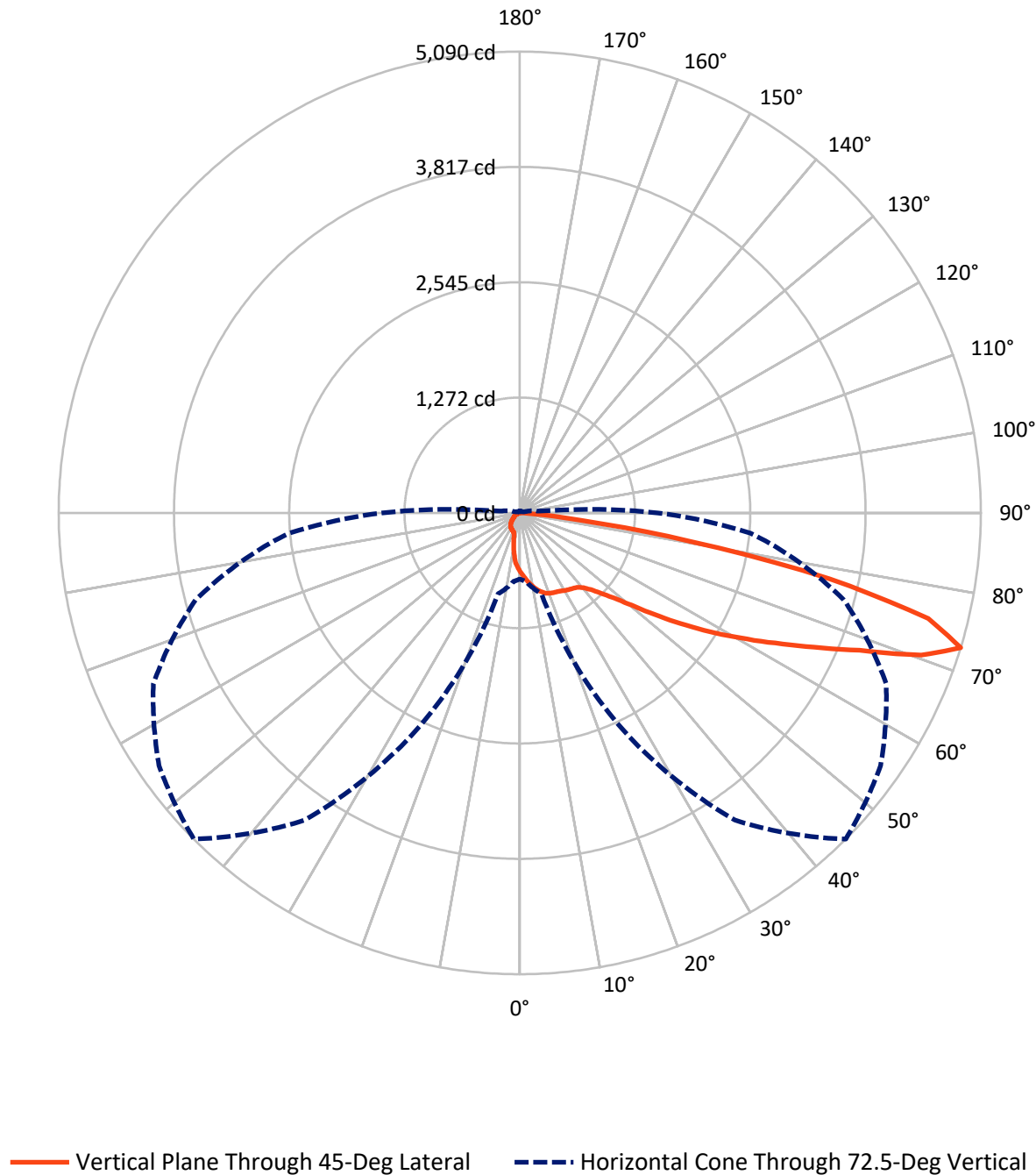
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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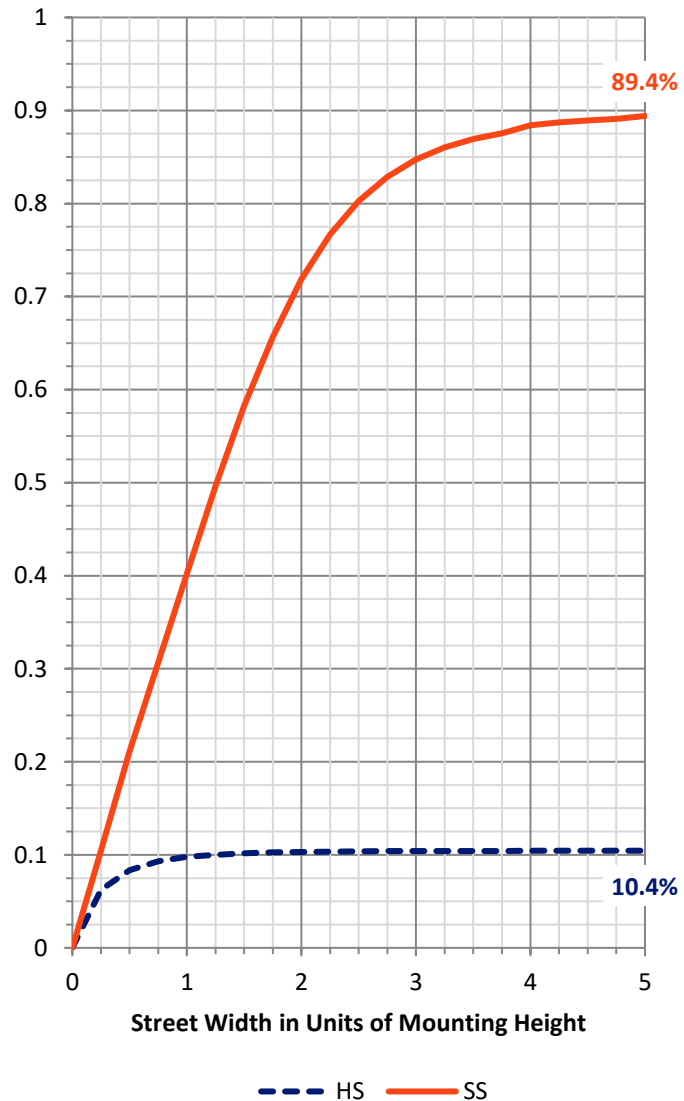
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	621.6	0.0	621.6
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	5293.7	0.0	5293.7
	% Fixture	89.5	0.0	89.5
Total	Lumens	5915.3	0.0	5915.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.1	1.0
10°-20°	178.4	3.0
20°-30°	293.0	5.0
30°-40°	415.6	7.0
40°-50°	686.9	11.6
50°-60°	1234.0	20.9
60°-70°	1713.5	29.0
70°-80°	1242.9	21.0
80°-90°	89.9	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°	5915.3	100.0
0°-180°	5915.3	100.0

Coefficient of Utilization



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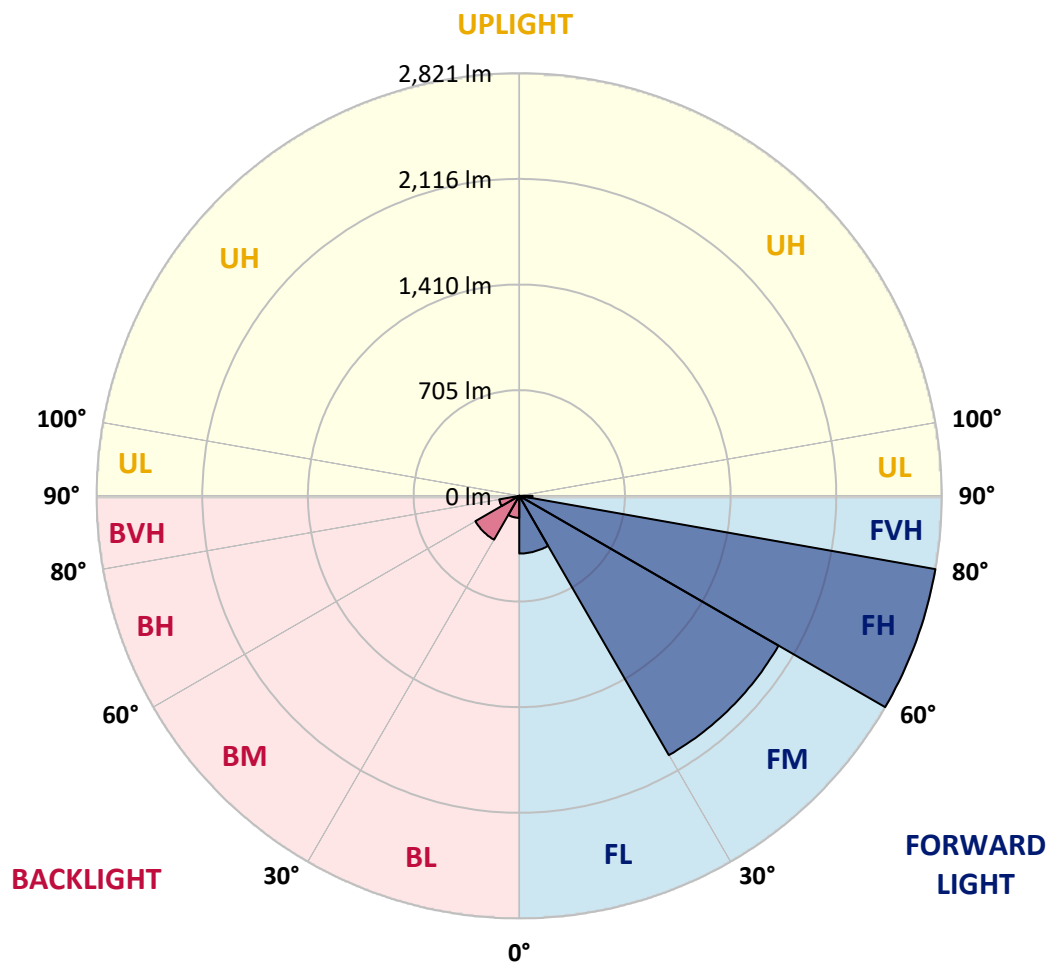
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	385.3	6.5			
FM	(30°-60°)	1998.5	33.8			
FH	(60°-80°)	2820.8	47.7			G2/5000
FVH	(80°-90°)	89.1	1.5			G1/100
BL	(0°-30°)	147.2	2.5	B1/500		
BM	(30°-60°)	338.0	5.7	B1/1000		
BH	(60°-80°)	135.5	2.3	B1/500		G1/500
BVH	(80°-90°)	0.8	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°	648.0	648.0	648.0	648.0	648.0	648.0	648.0	648.0	648.0	648.0	648.0
2.5°	707.8	709.0	708.2	703.4	695.3	690.8	688.4	680.3	675.1	665.8	656.1
5°	772.7	777.7	774.8	765.2	749.8	738.9	735.6	719.1	704.2	686.7	666.6
7.5°	841.8	844.3	839.0	826.5	805.9	787.3	784.5	761.5	737.7	711.0	683.6
10°	901.6	904.5	896.4	878.2	854.7	831.8	827.7	802.3	774.0	741.3	706.1
12.5°	951.6	954.5	944.0	922.2	896.4	872.5	868.5	841.8	810.8	774.4	730.8
15°	989.6	994.9	980.7	957.4	929.5	905.6	903.6	877.4	847.1	806.7	760.2
17.5°	1011.8	1017.1	1003.8	975.5	951.6	931.5	929.1	907.2	878.9	840.2	788.9
20°	1015.5	1020.3	1006.1	981.5	961.8	945.6	944.4	928.6	908.0	870.9	820.0
22.5°	1004.5	1010.6	997.7	977.8	964.2	955.7	954.1	945.2	933.5	902.0	849.1
25°	993.2	998.0	988.4	971.1	963.8	963.0	964.2	962.6	960.1	933.5	883.0
27.5°	992.4	997.7	986.8	970.3	966.2	974.7	975.9	983.6	985.5	962.2	915.7
30°	999.3	1003.0	992.4	975.1	973.0	992.4	992.8	1006.6	1009.8	986.4	948.0
32.5°	1014.2	1018.2	1007.8	982.4	979.5	1006.6	1007.8	1025.9	1031.1	1012.2	982.0
35°	1049.4	1054.2	1042.1	1002.6	992.4	1019.9	1023.6	1044.9	1055.4	1039.7	1017.1
37.5°	1137.0	1122.9	1106.3	1043.3	1021.9	1040.9	1046.9	1071.9	1090.6	1072.4	1059.0
40°	1354.6	1310.2	1258.5	1112.7	1073.6	1085.7	1090.6	1115.6	1141.0	1123.3	1116.8
42.5°	1681.2	1628.7	1545.6	1272.6	1151.5	1157.5	1161.2	1183.1	1218.9	1204.8	1206.4
45°	1972.3	1953.3	1868.6	1545.6	1297.2	1267.4	1271.8	1283.1	1336.0	1330.8	1341.3
47.5°	2196.1	2185.1	2119.7	1858.9	1543.5	1401.9	1414.4	1419.6	1495.9	1514.5	1542.7
50°	2368.1	2364.0	2305.4	2137.5	1865.4	1600.1	1604.5	1593.3	1707.4	1753.6	1807.2
52.5°	2530.3	2544.0	2500.9	2396.3	2209.0	1859.7	1858.9	1805.6	1959.8	2029.3	2120.9
55°	2676.9	2681.7	2686.2	2660.4	2554.6	2155.3	2147.6	2060.4	2252.5	2324.4	2423.7
57.5°	2814.5	2816.6	2856.2	2909.1	2914.3	2472.6	2458.5	2353.9	2572.3	2623.6	2684.6
60°	2907.1	2916.3	3000.0	3146.9	3211.1	2800.1	2792.4	2685.8	2897.8	2921.6	2910.3
62.5°	2773.9	2830.3	3041.1	3332.6	3491.3	3163.0	3159.4	3059.3	3240.1	3220.8	3123.9
65°	2245.3	2341.0	2711.6	3458.1	3766.3	3568.4	3573.7	3467.1	3591.8	3528.9	3297.5
67.5°	1570.6	1671.6	2110.1	3468.3	4073.6	4044.4	4074.7	3907.6	3965.3	3824.0	3338.6
70°	1086.1	1138.2	1423.6	3251.1	4312.9	4700.1	4699.3	4448.6	4336.8	3958.4	3128.7
72.5°	730.4	757.5	924.7	2579.2	4136.9	5089.7	5066.4	4862.1	4461.9	3702.1	2556.1
75°	308.1	327.9	427.9	1449.5	3272.8	4656.6	4593.1	4296.8	3964.5	2915.1	1594.8
77.5°	97.7	106.2	168.8	518.9	1802.8	3500.2	3433.1	2683.3	2657.1	1462.4	583.0
80°	46.4	54.1	94.9	208.4	709.4	1903.7	1894.4	1217.3	1143.1	394.8	117.1
82.5°	20.2	23.8	52.5	111.4	317.3	679.2	692.8	414.3	342.8	149.8	36.0
85°	6.5	8.5	24.2	51.2	134.1	168.8	166.8	98.5	138.1	81.6	12.5
87.5°	0.0	0.0	8.1	11.7	13.7	9.7	10.9	8.5	38.3	22.7	4.4
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°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	648.0	648.0	648.0	648.0	648.0	648.0	648.0	648.0	648.0	648.0	648.0
2.5°	651.3	644.8	633.4	623.0	613.7	604.4	598.8	590.7	589.9	589.9	591.9
5°	655.7	645.2	625.0	603.6	579.0	555.6	532.2	509.5	502.2	497.0	499.5
7.5°	668.6	652.1	620.1	579.4	532.6	481.2	445.4	406.6	391.7	383.6	384.8
10°	687.2	664.6	616.1	544.7	468.7	398.9	347.7	305.7	289.5	282.6	282.6
12.5°	707.8	679.9	608.8	501.4	398.9	315.3	265.3	245.9	243.4	243.4	243.4
15°	732.5	698.5	596.3	450.6	325.8	249.5	231.8	232.6	235.0	236.6	236.6
17.5°	757.9	718.3	576.6	393.7	261.3	224.5	224.9	226.1	228.2	229.7	229.7
20°	785.4	738.1	550.3	333.1	224.1	217.2	218.4	219.7	221.3	222.1	222.4
22.5°	814.8	756.7	519.3	273.8	211.6	211.2	211.6	212.8	214.8	214.8	215.6
25°	846.2	777.3	483.7	230.5	205.1	205.1	205.9	206.7	208.4	208.4	208.8
27.5°	878.5	796.2	446.2	208.0	199.5	199.1	199.1	200.3	201.1	201.5	201.9
30°	914.1	818.5	408.6	203.1	195.1	193.0	191.8	192.6	193.4	193.8	194.6
32.5°	950.5	839.8	375.0	205.1	190.5	187.0	182.9	182.1	182.1	183.7	184.9
35°	990.9	863.3	349.2	212.0	188.2	178.0	171.6	168.0	168.4	170.8	172.0
37.5°	1039.2	891.5	330.3	218.0	186.5	168.0	157.4	153.0	150.2	153.0	152.2
40°	1102.7	933.1	316.5	222.8	184.5	156.2	142.2	134.9	129.6	131.2	130.4
42.5°	1196.0	998.5	311.3	223.2	180.1	142.6	126.4	116.6	109.1	109.4	107.8
45°	1326.8	1101.9	338.4	218.0	170.4	127.6	109.8	96.9	92.0	90.8	89.3
47.5°	1506.0	1252.4	401.0	207.2	156.2	113.1	93.7	82.8	79.1	77.1	76.0
50°	1746.3	1445.9	470.4	195.1	142.2	99.3	80.4	73.5	71.0	69.1	68.7
52.5°	2024.9	1642.0	527.3	182.9	128.0	87.2	71.9	67.9	65.8	64.2	63.8
55°	2280.4	1777.4	524.1	169.9	114.3	77.5	65.8	63.3	61.0	59.3	58.5
57.5°	2439.5	1796.3	432.0	155.8	98.5	69.8	60.2	58.5	55.8	53.7	53.3
60°	2512.6	1688.1	302.8	137.2	82.8	62.6	54.1	53.3	49.7	46.8	46.0
62.5°	2525.9	1487.1	201.9	114.3	69.1	55.8	48.1	46.8	42.0	37.1	34.7
65°	2471.8	1199.6	139.7	89.3	58.9	48.5	41.2	38.7	33.5	28.7	27.1
67.5°	2300.6	842.2	97.3	64.2	50.0	38.3	32.7	31.9	27.9	23.8	22.7
70°	1986.9	480.1	65.0	48.1	39.6	26.2	25.8	26.6	22.7	19.4	17.7
72.5°	1523.4	219.7	40.4	35.2	27.1	17.7	20.6	21.0	17.3	14.6	12.9
75°	896.8	94.1	25.4	22.7	13.7	11.7	15.0	15.4	11.7	9.3	8.1
77.5°	305.2	35.6	16.2	13.3	6.9	6.5	9.7	9.7	6.5	3.6	2.9
80°	69.5	13.3	8.1	5.2	3.3	2.9	3.3	2.9	1.6	0.4	0.0
82.5°	19.8	5.2	3.3	2.0	1.2	1.2	0.4	0.0	0.0	0.0	0.0
85°	5.6	2.5	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	0.4	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)