

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: P968256

Luminaire Tested: **NAV-SB5B-735-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968256
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-735-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21290.3 lumens
Efficiency: N/A
Efficacy: 116.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 182.7
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



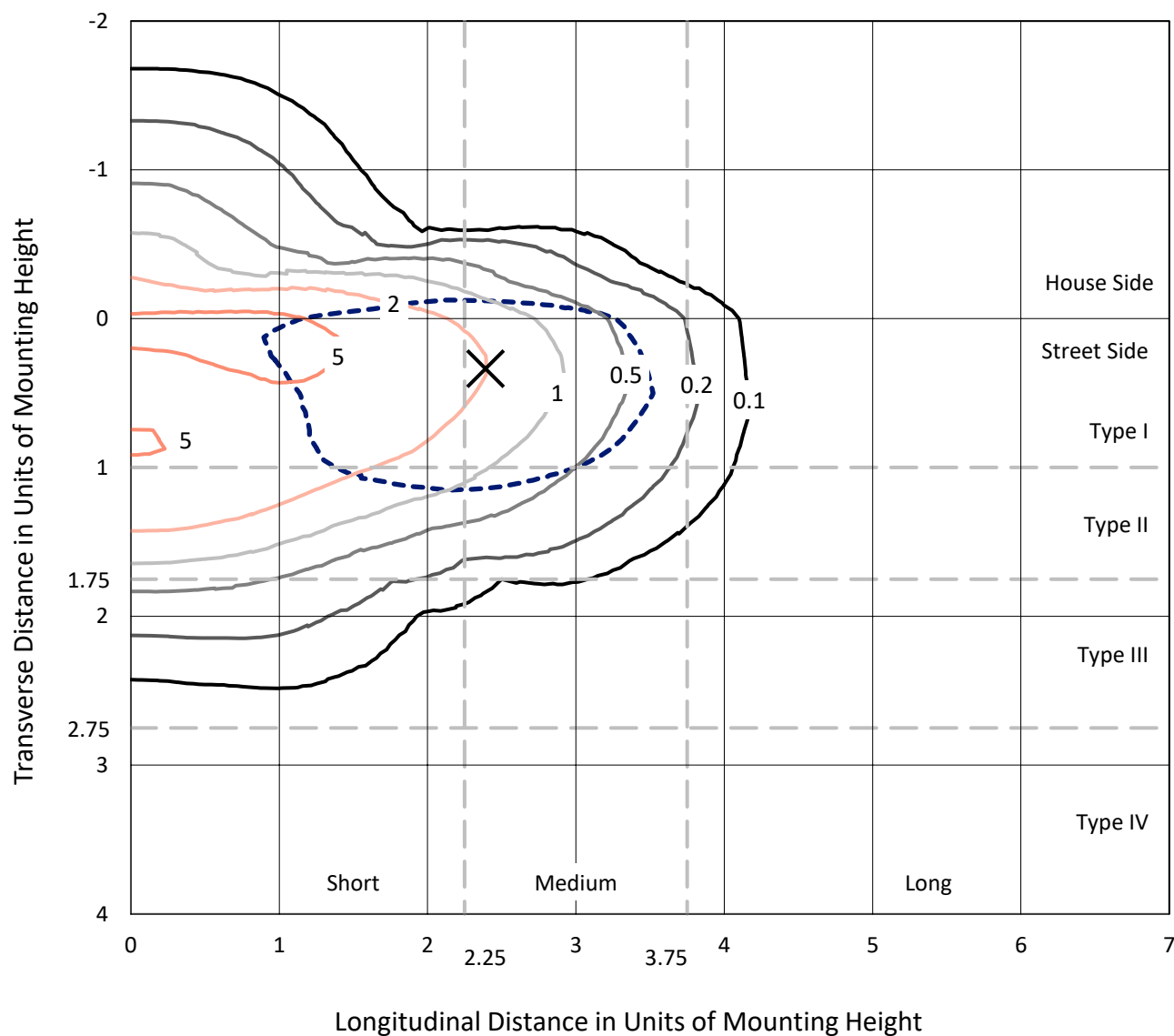
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

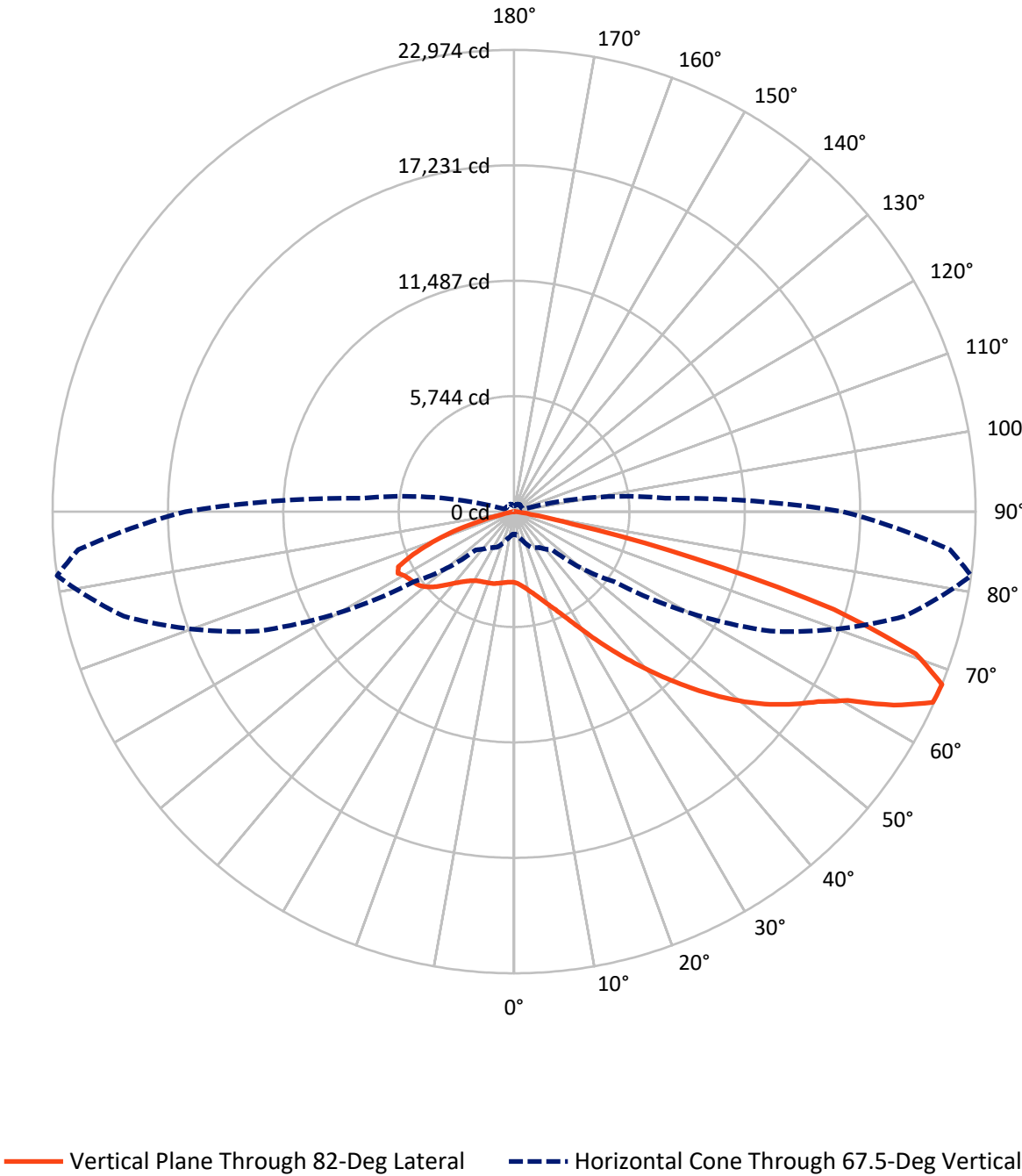
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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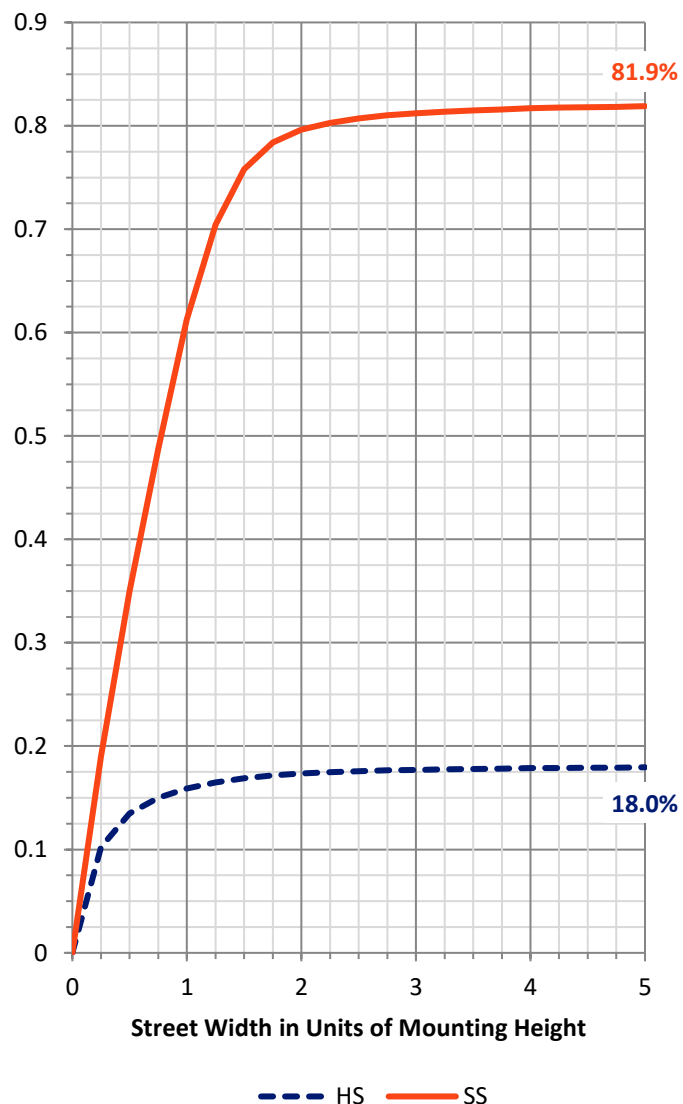
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3856.6	0.0	3856.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	17433.7	0.0	17433.7
	% Fixture	81.9	0.0	81.9
Total	Lumens	21290.3	0.0	21290.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	314.2	1.5
10°-20°	816.6	3.8
20°-30°	1307.9	6.1
30°-40°	2312.8	10.9
40°-50°	4052.2	19.0
50°-60°	5404.5	25.4
60°-70°	5031.3	23.6
70°-80°	1931.0	9.1
80°-90°	119.9	0.6
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°	21290.3	100.0
0°-180°	21290.3	100.0

Coefficient of Utilization



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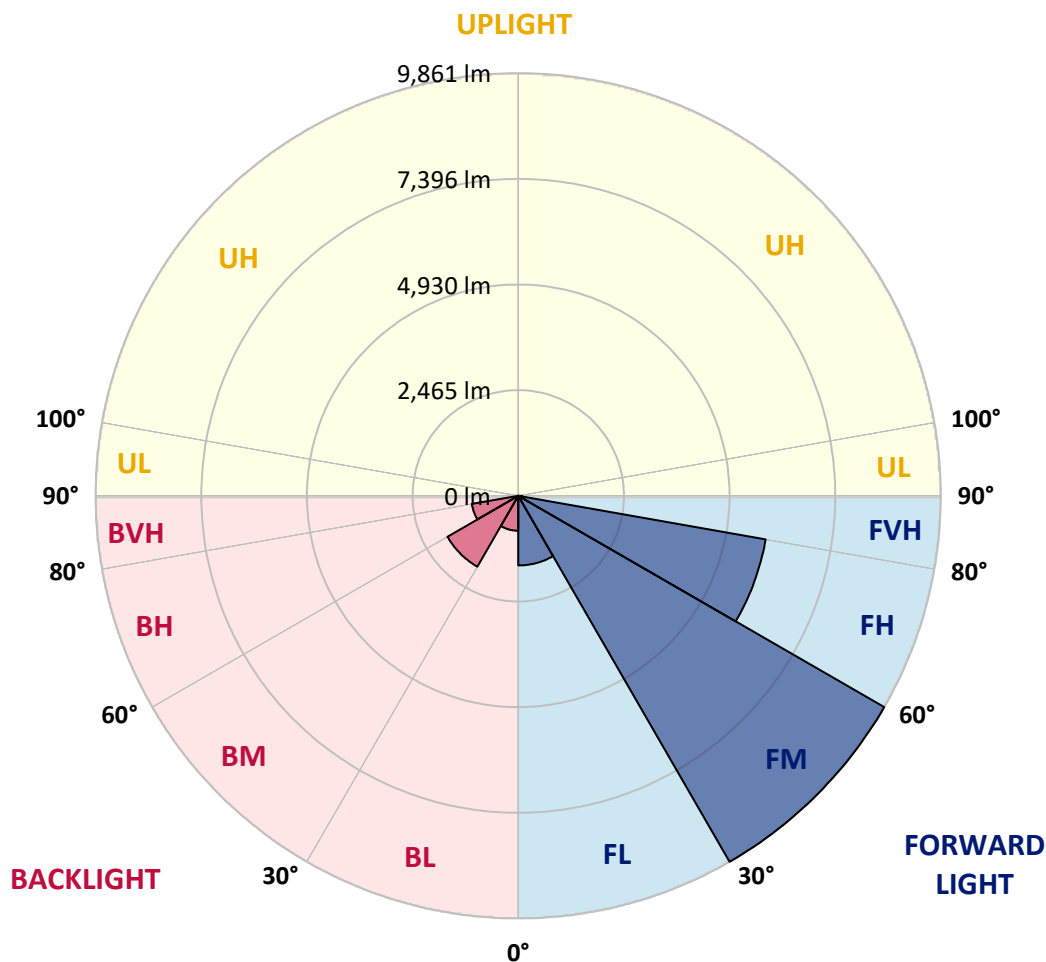
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1624.2	7.6			
FM	(30°-60°)	9860.8	46.3			
FH	(60°-80°)	5861.5	27.5			G3/7500
FVH	(80°-90°)	87.2	0.4			G1/100
BL	(0°-30°)	814.5	3.8	B2/1000		
BM	(30°-60°)	1908.6	9.0	B2/2500		
BH	(60°-80°)	1100.7	5.2	B3/2500		G3/2500
BVH	(80°-90°)	32.7	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3527.1	3527.1	3527.1	3527.1	3527.1	3527.1	3527.1	3527.1	3527.1	3527.1	3527.1
2.5°	3727.9	3749.3	3737.0	3730.9	3720.2	3704.9	3692.7	3654.3	3614.5	3588.4	3579.2
5°	3803.0	3824.5	3822.9	3829.1	3836.7	3841.3	3838.2	3795.4	3738.6	3694.2	3668.1
7.5°	3738.6	3763.2	3783.1	3813.7	3867.3	3924.1	3951.7	3942.5	3884.2	3822.9	3790.8
10°	3556.2	3582.3	3629.7	3701.8	3815.3	3937.8	4040.6	4088.1	4051.3	3983.9	3939.4
12.5°	3222.1	3248.1	3341.6	3497.9	3688.1	3901.0	4097.3	4224.5	4233.8	4166.3	4114.1
15°	2846.5	2872.6	2972.2	3168.4	3458.1	3799.9	4128.0	4368.7	4449.8	4391.6	4328.8
17.5°	2613.5	2636.5	2711.6	2869.5	3171.5	3597.5	4117.2	4521.9	4707.4	4661.4	4586.3
20°	2543.0	2562.9	2598.2	2708.6	2959.9	3387.6	4046.7	4666.0	4984.8	4958.7	4874.5
22.5°	2618.1	2636.5	2647.3	2696.3	2854.1	3249.7	3957.8	4813.1	5306.7	5309.8	5207.1
25°	2791.3	2809.7	2797.4	2828.1	2897.1	3206.7	3924.1	4986.3	5711.4	5745.1	5628.6
27.5°	3076.4	3078.0	3048.9	3047.3	3058.0	3271.1	3959.4	5171.8	6221.9	6284.7	6140.6
30°	3648.2	3625.2	3513.3	3392.2	3337.0	3464.2	4057.5	5391.0	6824.2	6936.2	6755.3
32.5°	4529.6	4495.9	4290.4	4000.7	3709.5	3775.4	4233.8	5640.9	7480.2	7682.6	7461.9
35°	5486.0	5476.9	5262.2	4831.5	4322.6	4218.4	4520.4	5968.9	8196.1	8518.1	8255.9
37.5°	6375.1	6370.5	6247.9	5740.5	5121.2	4836.2	4980.2	6398.0	8962.6	9428.6	9118.9
40°	7187.5	7201.3	7078.6	6625.0	6001.1	5628.6	5605.6	6928.5	9814.8	10420.3	10052.4
42.5°	7889.5	7904.9	7780.8	7445.0	6870.2	6505.4	6373.6	7578.4	10647.2	11485.6	11050.3
45°	8366.3	8461.3	8442.9	8174.7	7762.3	7383.7	7296.4	8393.8	11595.9	12615.3	12104.8
47.5°	8501.1	8588.6	8726.4	8763.2	8511.9	8139.4	8243.7	9376.4	12555.5	13746.6	13165.6
50°	8168.5	8249.8	8536.4	8918.1	9092.9	8977.9	9164.9	10429.5	13538.1	14874.7	14206.4
52.5°	7512.4	7595.2	7957.0	8560.9	9273.7	9635.5	10089.2	11467.2	14490.0	15943.2	15192.0
55°	6563.7	6651.0	7115.4	7799.1	8928.9	9906.8	10860.2	12503.5	15362.2	16904.2	16081.1
57.5°	5273.0	5337.4	5820.3	6776.7	8061.2	9637.0	11428.9	13634.7	16183.8	17848.4	16962.5
60°	3436.6	3493.4	4054.4	5121.2	6623.4	8735.7	11542.3	14896.2	17275.1	19076.3	18150.4
62.5°	2285.4	2323.8	2656.4	3439.7	4664.5	7005.1	10878.6	15903.3	18875.5	21213.1	20187.6
65°	1568.1	1606.4	1939.1	2484.7	3013.6	4633.8	8970.2	15769.9	20325.5	22909.9	21697.4
67.5°	1119.0	1151.2	1433.3	1948.2	2181.2	2691.6	6080.8	14065.4	20117.1	22974.2	21778.7
70°	801.7	820.1	1053.1	1517.5	1733.7	1617.1	3381.5	10757.5	17613.9	21214.6	20120.1
72.5°	561.0	567.1	731.1	1155.8	1396.5	1180.3	1609.5	7172.2	13321.9	16651.3	15598.2
75°	380.2	387.9	492.0	847.7	1120.5	901.3	852.3	3845.9	7820.5	9217.0	8262.0
77.5°	233.0	236.1	317.3	579.4	838.4	686.7	548.8	1629.4	3025.8	2970.7	2532.3
80°	131.8	131.8	202.3	360.2	571.7	443.0	384.8	692.8	958.1	841.5	741.9
82.5°	73.6	75.1	147.2	223.8	378.6	262.1	211.6	320.4	413.9	366.3	318.9
85°	30.6	33.7	90.4	105.8	180.9	130.3	85.8	134.9	153.2	136.4	99.6
87.5°	3.1	4.6	27.6	19.9	21.4	26.0	12.3	26.0	21.4	21.4	15.4
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°	3527.1	3527.1	3527.1	3527.1	3527.1	3527.1	3527.1	3527.1	3527.1	3527.1	3527.1
2.5°	3550.1	3527.1	3468.8	3401.4	3312.5	3269.5	3211.3	3171.5	3137.7	3140.8	3110.2
5°	3619.1	3560.8	3430.5	3268.0	3065.7	2921.6	2768.3	2662.5	2576.7	2558.3	2516.9
7.5°	3714.1	3622.1	3393.7	3100.9	2759.1	2500.1	2268.6	2119.9	2014.1	1980.4	1946.7
10°	3836.7	3703.3	3346.2	2890.9	2398.9	2069.4	1821.0	1704.6	1632.5	1607.9	1589.6
12.5°	3979.3	3796.9	3283.4	2635.0	2028.0	1710.6	1552.8	1494.6	1471.5	1463.9	1459.3
15°	4158.6	3913.3	3188.4	2331.5	1713.7	1491.5	1424.0	1416.3	1419.4	1416.3	1414.8
17.5°	4371.6	4040.6	3033.5	2018.7	1502.2	1379.5	1355.0	1361.2	1368.8	1367.2	1364.3
20°	4604.7	4166.3	2835.8	1741.3	1358.1	1299.8	1286.1	1292.2	1298.4	1295.3	1293.8
22.5°	4869.9	4301.2	2616.5	1525.2	1261.6	1226.3	1210.9	1212.5	1212.5	1206.3	1203.2
25°	5187.1	4449.8	2386.6	1371.9	1188.0	1160.4	1142.0	1135.8	1126.7	1108.2	1105.2
27.5°	5565.7	4607.8	2165.9	1264.6	1129.8	1103.6	1082.2	1066.8	1043.9	1013.2	1010.1
30°	5991.9	4799.4	1978.9	1197.2	1083.7	1057.7	1033.1	1010.1	976.4	938.1	935.0
32.5°	6493.2	5004.8	1842.4	1152.7	1042.3	1014.7	985.6	958.1	921.3	882.9	884.5
35°	7091.0	5253.0	1762.8	1122.1	1010.1	973.3	941.2	910.5	882.9	849.2	846.1
37.5°	7739.4	5516.8	1738.3	1106.7	988.7	931.9	895.1	873.7	870.6	850.7	849.2
40°	8449.1	5829.4	1756.6	1097.5	965.7	892.2	852.3	847.7	855.4	820.1	821.6
42.5°	9200.1	6200.3	1787.3	1086.8	933.5	852.3	814.0	814.0	807.8	758.8	758.8
45°	10012.5	6628.1	1817.9	1060.8	895.1	812.4	783.3	772.5	746.5	698.9	697.4
47.5°	10831.1	7063.4	1840.9	1013.2	849.2	778.7	752.7	728.1	689.8	646.9	645.3
50°	11608.2	7454.2	1816.4	942.7	797.0	746.5	718.9	685.2	643.8	614.7	610.1
52.5°	12302.7	7793.0	1712.2	860.0	741.9	712.8	688.3	653.0	619.3	588.7	585.6
55°	12906.6	8067.4	1528.3	781.8	692.8	683.7	659.1	614.7	568.7	542.6	539.6
57.5°	13486.0	8275.8	1298.4	717.4	648.4	651.5	614.7	574.8	531.9	504.3	501.2
60°	14257.0	8554.9	1065.3	657.6	600.9	610.1	570.2	541.1	487.5	452.2	447.6
62.5°	15489.4	8988.6	846.1	584.0	545.7	548.8	531.9	496.6	432.2	390.8	387.9
65°	16467.3	8829.1	666.8	504.3	482.9	487.5	487.5	449.2	380.2	332.6	328.0
67.5°	16357.0	7560.0	531.9	426.1	423.0	426.1	436.9	404.7	337.2	298.9	292.7
70°	15067.9	6013.4	426.1	354.1	367.9	360.2	390.8	369.4	303.5	265.2	260.6
72.5°	12295.0	4331.9	324.9	292.7	282.1	294.3	352.6	332.6	253.0	210.0	205.4
75°	7184.4	2311.6	242.2	231.4	203.9	245.3	312.7	283.6	193.1	154.8	150.3
77.5°	2339.2	806.3	177.8	170.1	151.8	197.7	266.7	239.1	157.8	122.6	118.1
80°	626.9	243.7	121.1	111.9	98.1	147.2	211.6	190.0	113.5	79.7	78.2
82.5°	251.4	102.7	70.5	62.8	53.6	101.2	167.1	153.2	84.4	50.6	50.6
85°	81.3	33.7	26.0	19.9	24.5	62.8	99.6	104.2	59.8	26.0	19.9
87.5°	10.8	4.6	4.6	6.1	4.6	10.8	30.6	29.1	16.9	3.1	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)