

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: P968947

Luminaire Tested: **NAV-SB5C-830-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968947
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-830-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34866.4 lumens
Efficiency: N/A
Efficacy: 139.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

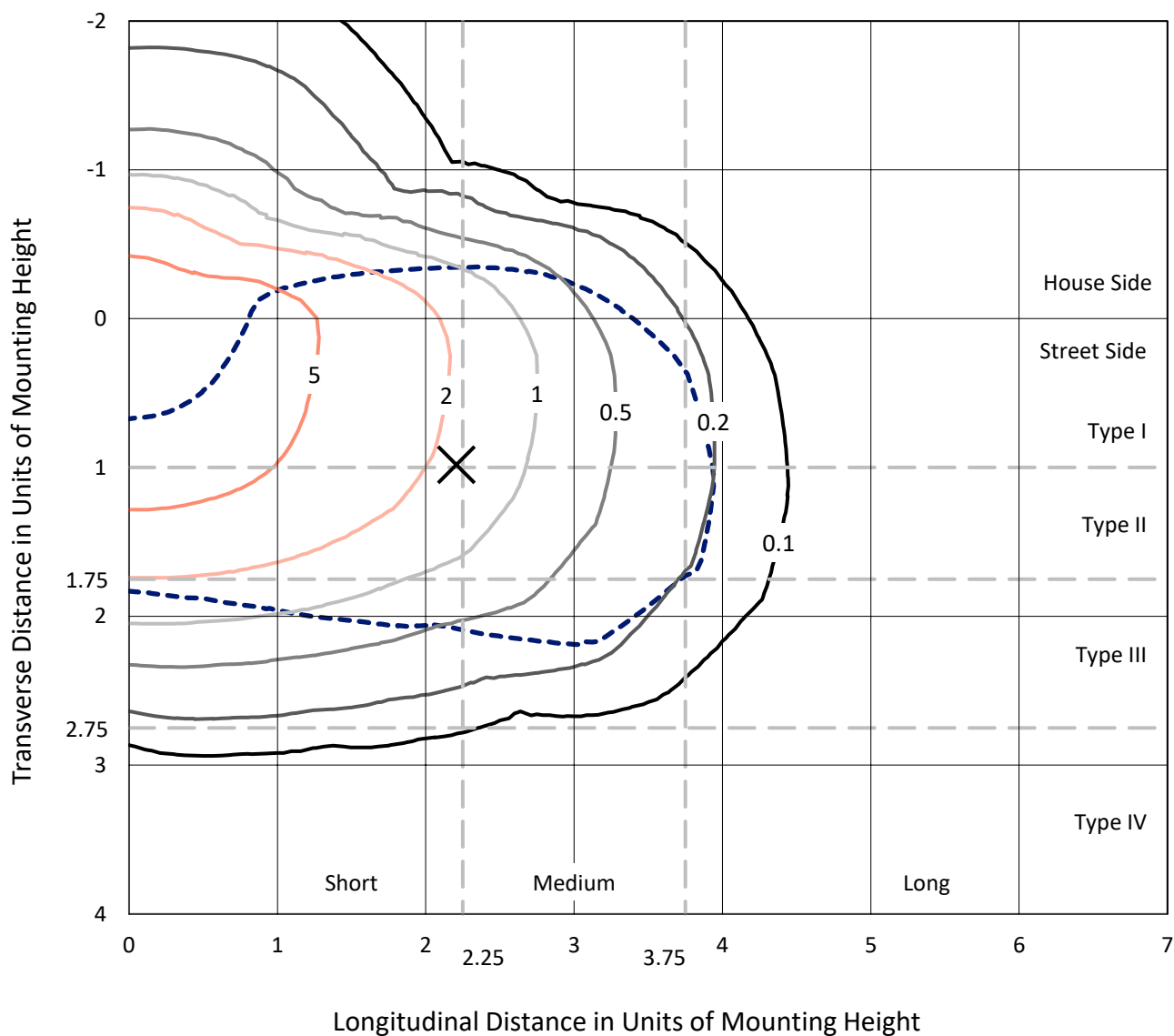
Input Watts (W): 249.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

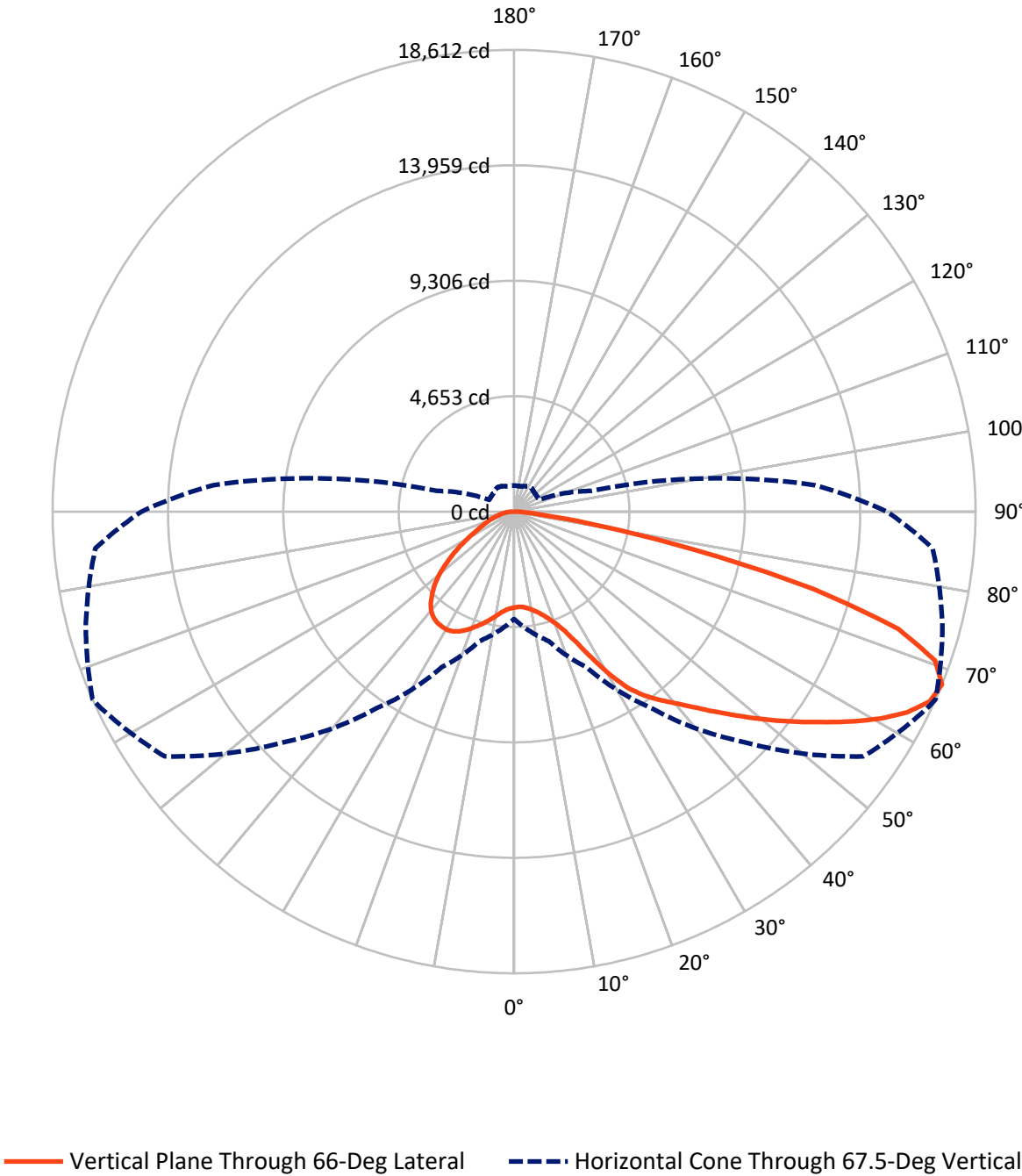
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.8 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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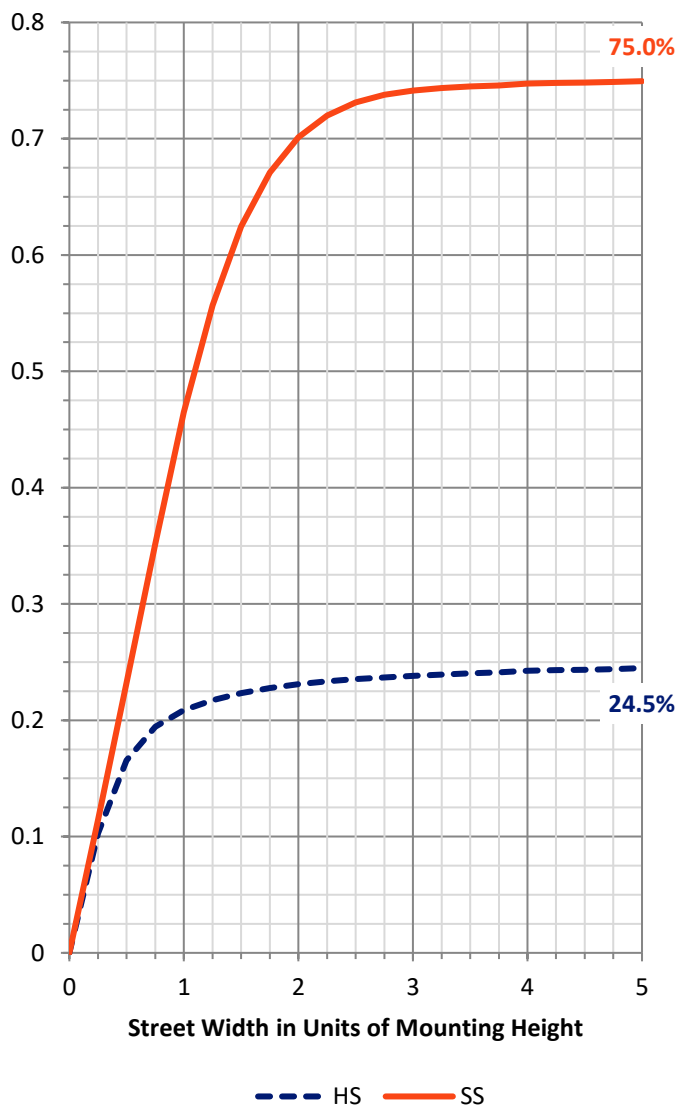
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8669.4	0.0	8669.4
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	26197.0	0.0	26197.0
	% Fixture	75.1	0.0	75.1
Total	Lumens	34866.4	0.0	34866.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	383.4	1.1
10°-20°	1266.7	3.6
20°-30°	2441.6	7.0
30°-40°	4281.0	12.3
40°-50°	6364.4	18.3
50°-60°	8067.5	23.1
60°-70°	7893.9	22.6
70°-80°	3765.4	10.8
80°-90°	402.4	1.2
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°	34866.4	100.0
0°-180°	34866.4	100.0

Coefficient of Utilization



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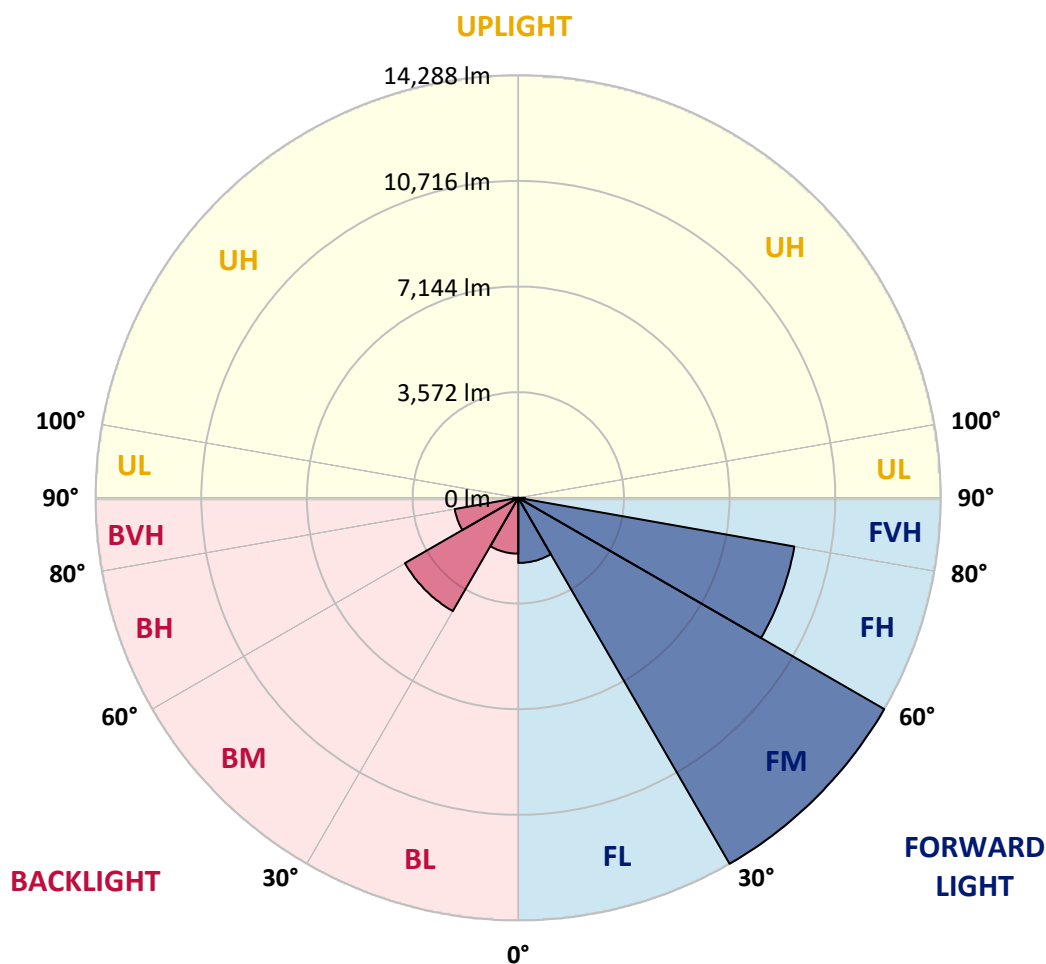
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2203.2	6.3			
FM	(30°-60°)	14288.0	41.0			
FH	(60°-80°)	9477.6	27.2			G4/12000
FVH	(80°-90°)	228.2	0.7			G3/500
BL	(0°-30°)	1888.5	5.4	B3/2500		
BM	(30°-60°)	4425.0	12.7	B3/5000		
BH	(60°-80°)	2181.7	6.3	B3/2500		G3/2500
BVH	(80°-90°)	174.3	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3867.1	3867.1	3867.1	3867.1	3867.1	3867.1	3867.1	3867.1	3867.1	3867.1	3867.1
2.5°	3826.8	3848.9	3843.3	3834.2	3832.4	3836.0	3841.5	3847.0	3845.2	3854.3	3869.0
5°	3815.9	3837.8	3836.0	3836.0	3843.3	3858.0	3867.1	3876.3	3867.1	3878.1	3898.3
7.5°	3823.1	3839.6	3847.0	3854.3	3872.7	3900.1	3922.1	3942.3	3931.3	3944.1	3969.7
10°	3916.6	3929.4	3936.7	3936.7	3949.5	3980.7	4002.7	4039.3	4030.2	4050.3	4083.3
12.5°	4087.0	4099.8	4099.8	4092.5	4101.6	4121.7	4129.1	4169.4	4152.9	4185.9	4218.9
15°	4295.8	4321.5	4301.3	4288.5	4292.2	4312.3	4310.4	4341.6	4325.1	4352.6	4381.9
17.5°	4526.6	4559.6	4526.6	4524.8	4517.5	4539.4	4541.3	4568.7	4539.4	4559.6	4579.8
20°	4799.6	4845.4	4817.9	4827.0	4810.5	4819.8	4828.9	4869.2	4823.4	4838.1	4832.6
22.5°	5184.2	5239.3	5210.0	5244.7	5233.8	5226.4	5224.6	5296.1	5224.6	5230.1	5177.0
25°	5744.8	5810.8	5759.5	5807.1	5807.1	5830.9	5858.4	5950.0	5830.9	5796.2	5658.7
27.5°	6572.8	6638.8	6538.1	6567.4	6558.3	6616.8	6587.5	6814.7	6686.5	6629.7	6353.1
30°	7569.4	7686.7	7496.1	7488.9	7479.6	7573.1	7615.2	7765.4	7635.3	7578.5	7245.2
32.5°	8646.6	8769.3	8542.1	8476.2	8441.4	8498.2	8463.4	8584.3	8494.5	8406.6	7994.4
35°	9786.0	9906.9	9690.8	9562.5	9423.3	9304.2	9179.7	9210.8	9126.5	8992.8	8565.9
37.5°	10863.2	11084.9	10855.9	10718.4	10462.0	10229.3	9881.3	9736.6	9657.8	9535.1	9104.6
40°	11960.5	12086.9	11912.9	11795.6	11517.2	11152.6	10595.7	10289.8	10183.6	10064.5	9699.9
42.5°	12768.3	12889.3	12795.8	12715.2	12497.2	12074.1	11354.1	10971.3	10817.3	10683.7	10374.0
45°	13409.6	13499.2	13440.6	13469.9	13376.6	12966.2	12140.0	11702.2	11542.8	11379.8	11136.1
47.5°	13667.9	13763.1	13856.5	14030.5	14189.9	13887.6	12984.5	12493.5	12325.0	12158.3	11918.4
50°	13638.5	13735.6	14006.7	14376.8	14871.4	14770.7	13874.8	13336.3	13180.6	12990.0	12768.3
52.5°	13404.0	13513.9	13862.0	14477.5	15265.2	15432.0	14781.6	14206.4	14059.8	13832.7	13611.1
55°	12788.5	12854.4	13376.6	14248.5	15358.7	15893.5	15670.1	15133.3	14986.8	14669.9	14428.1
57.5°	11647.3	11742.5	12502.7	13631.2	15124.2	16206.8	16450.4	16107.9	15966.8	15510.7	15257.9
60°	10157.9	10310.0	11180.1	12594.3	14527.0	16205.0	17159.4	17066.0	16948.8	16338.7	16075.0
62.5°	8472.5	8648.4	9485.6	11128.8	13482.7	15745.2	17602.7	17868.4	17807.9	17102.6	16765.5
65°	6506.9	6627.9	7461.4	9232.8	11857.9	14757.8	17654.1	18416.1	18427.1	17683.3	17126.4
67.5°	4332.5	4680.6	5404.1	6928.3	9681.6	13143.9	17203.4	18505.9	18612.2	17883.1	16945.1
70°	2114.1	2572.0	3280.9	4502.8	6928.3	10669.0	16025.5	17769.4	18005.8	17300.5	15864.2
72.5°	877.5	1025.8	1412.3	2222.1	3977.1	7199.4	13658.6	15772.7	16210.5	15329.4	13338.1
75°	591.7	641.1	807.9	1139.5	1811.8	3550.2	9850.1	11760.8	12466.0	11577.6	9463.6
77.5°	456.1	487.3	588.0	796.8	1077.2	1342.7	5272.2	7087.7	7452.2	6899.0	4924.2
80°	359.1	382.8	439.6	580.7	763.9	718.1	1797.1	3211.3	3422.0	2870.6	1582.8
82.5°	311.4	320.6	315.1	393.9	507.5	419.5	589.9	1185.2	1308.0	948.9	516.6
85°	225.3	250.9	262.0	243.6	269.3	212.5	241.8	419.5	461.7	412.2	291.3
87.5°	91.6	135.6	166.7	157.5	98.9	60.5	75.1	122.7	141.0	153.9	95.2
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°	3867.1	3867.1	3867.1	3867.1	3867.1	3867.1	3867.1	3867.1	3867.1	3867.1	3867.1
2.5°	3870.8	3883.6	3892.7	3903.8	3911.1	3922.1	3944.1	3956.9	3958.8	3967.9	3966.0
5°	3905.7	3923.9	3944.1	3973.4	4006.4	4033.9	4076.0	4105.3	4116.3	4125.4	4123.6
7.5°	3980.7	4006.4	4043.0	4094.3	4141.9	4178.6	4229.9	4264.7	4299.5	4312.3	4314.1
10°	4092.5	4129.1	4182.2	4251.8	4303.2	4350.8	4403.9	4433.2	4468.0	4482.6	4490.0
12.5°	4231.7	4270.2	4339.7	4436.8	4484.5	4517.5	4535.8	4528.4	4535.8	4548.6	4552.2
15°	4391.1	4433.2	4511.9	4616.4	4649.4	4620.1	4579.8	4543.1	4537.6	4541.3	4554.1
17.5°	4579.8	4610.9	4702.5	4790.4	4766.6	4645.7	4557.8	4499.1	4469.8	4460.7	4473.5
20°	4843.5	4843.5	4918.7	4973.6	4814.2	4609.0	4471.7	4376.4	4316.0	4290.3	4284.8
22.5°	5164.2	5134.8	5182.4	5144.0	4805.1	4506.5	4316.0	4151.0	4059.5	4022.8	4017.4
25°	5570.8	5536.0	5523.2	5285.0	4739.1	4343.4	4033.9	3834.2	3753.6	3733.5	3737.0
27.5°	6184.5	6096.6	5929.8	5362.0	4618.2	4087.0	3704.1	3519.1	3473.3	3475.2	3480.6
30°	7001.6	6825.7	6417.1	5374.8	4420.4	3724.2	3367.0	3235.1	3213.2	3222.3	3253.5
32.5°	7758.1	7591.4	6915.5	5316.2	4116.3	3368.9	3064.7	2976.8	2943.9	2954.9	2969.5
35°	8351.6	8305.9	7377.0	5233.8	3742.6	3035.4	2793.6	2718.5	2654.4	2639.8	2650.8
37.5°	8912.2	8893.9	7723.3	5118.3	3372.6	2799.2	2575.6	2476.7	2383.3	2332.0	2333.8
40°	9527.7	9509.4	7950.4	4940.6	3044.7	2594.0	2379.6	2249.6	2134.2	2040.8	2049.9
42.5°	10220.2	10112.1	8058.6	4686.0	2766.2	2419.9	2220.3	2044.4	1892.4	1806.3	1811.8
45°	10976.7	10733.1	8056.7	4361.8	2531.6	2260.5	2049.9	1800.7	1659.7	1579.1	1575.4
47.5°	11779.1	11326.7	7957.8	4002.7	2304.5	2084.7	1786.1	1595.6	1502.1	1452.7	1441.7
50°	12607.2	11881.7	7789.3	3590.6	2071.8	1885.1	1621.2	1491.2	1419.7	1373.9	1357.4
52.5°	13385.7	12385.5	7585.9	3123.4	1835.6	1690.8	1548.0	1447.2	1372.1	1320.8	1298.8
55°	14109.3	12819.7	7298.3	2645.2	1643.2	1560.8	1513.1	1428.8	1342.7	1282.4	1258.5
57.5°	14752.3	13101.8	6801.9	2196.5	1505.8	1471.0	1476.5	1397.7	1298.8	1247.5	1214.5
60°	15287.3	13308.8	6067.3	1780.6	1394.1	1383.1	1419.7	1339.2	1223.7	1165.1	1139.5
62.5°	15607.8	13305.1	5166.0	1458.2	1298.8	1302.5	1344.6	1265.9	1148.6	1093.7	1077.2
65°	15580.3	12979.1	4176.8	1247.5	1207.2	1210.9	1265.9	1185.2	1086.3	1053.4	1051.5
67.5°	15029.0	12184.0	3203.9	1110.2	1106.5	1123.0	1187.1	1130.3	1047.9	1044.2	1049.7
70°	13535.9	10533.4	2308.2	1000.2	1002.0	1025.8	1110.2	1095.5	1027.7	1035.0	1033.2
72.5°	10854.0	8031.1	1549.8	884.8	886.6	925.1	1036.9	1067.9	1007.6	1104.6	1119.3
75°	7228.7	5008.5	996.5	762.1	763.9	813.3	972.7	1014.9	952.6	1101.0	1110.2
77.5°	3473.3	2251.4	721.8	641.1	641.1	687.0	840.8	908.7	811.5	855.5	784.0
80°	1199.9	846.3	567.8	516.6	505.6	536.8	709.0	787.7	699.8	644.8	604.5
82.5°	472.6	439.6	456.1	401.2	364.6	384.7	551.4	650.4	514.8	465.4	463.5
85°	271.1	285.8	322.5	265.6	210.6	236.4	404.9	467.1	388.4	342.6	349.9
87.5°	73.3	100.8	148.4	137.4	95.2	100.8	192.4	258.3	223.4	172.2	177.7
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)