

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: P971553

Luminaire Tested: **NAV-SB6D-827-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971553
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6D-827-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 54360.9 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

Input Watts (W): 440.1
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

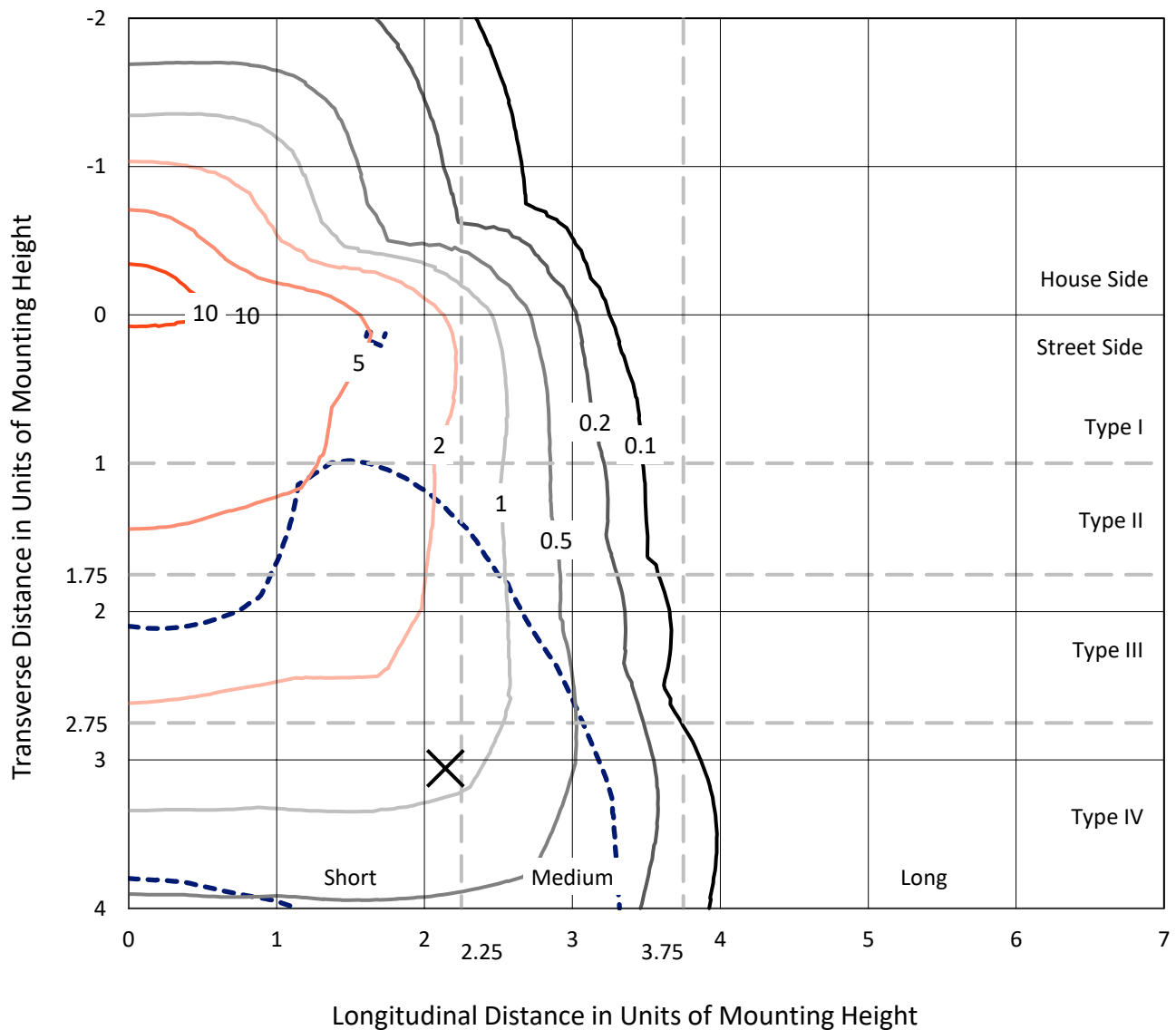


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Iso-Footcandle Lines of Horizontal Illumination

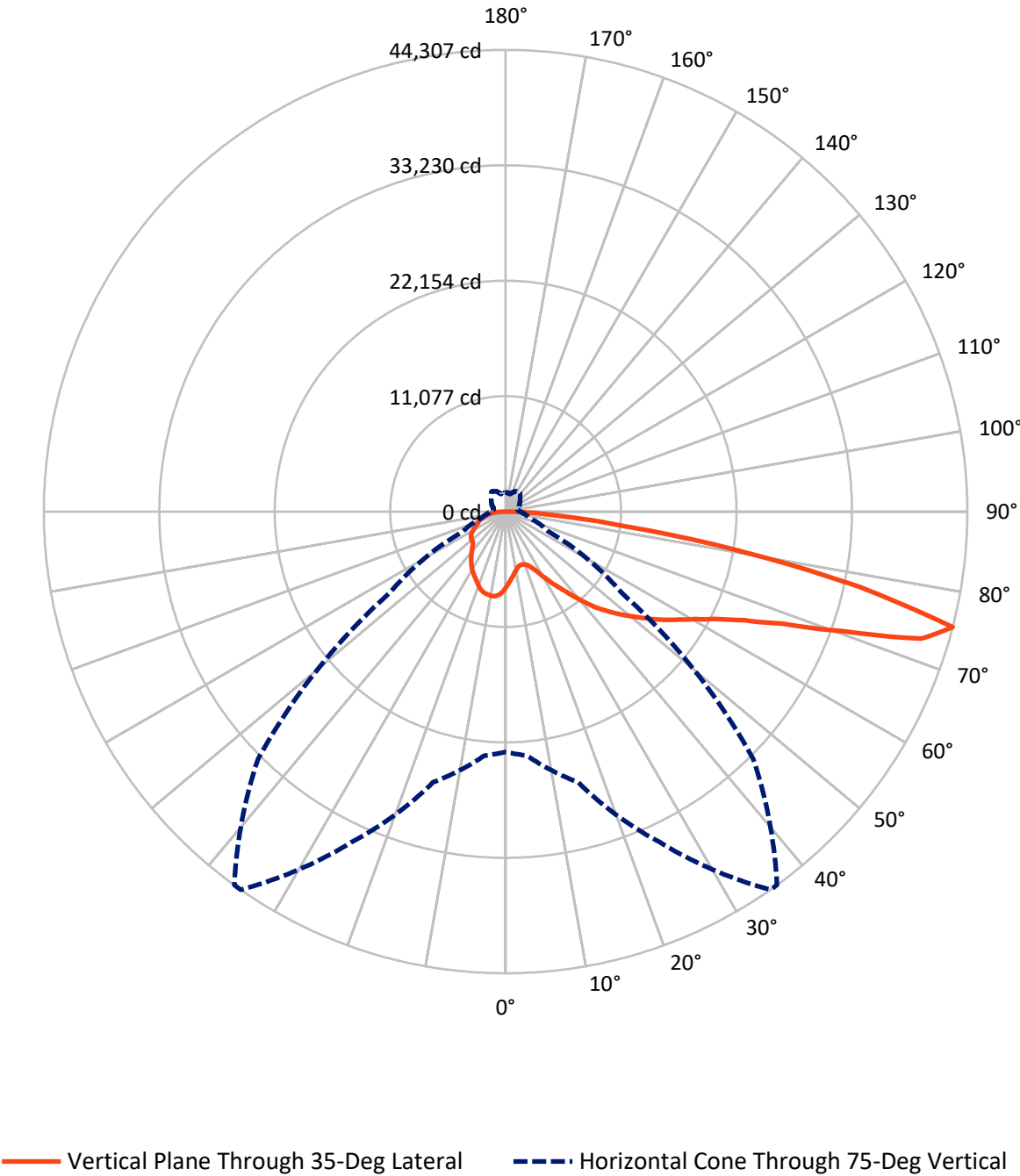
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.8 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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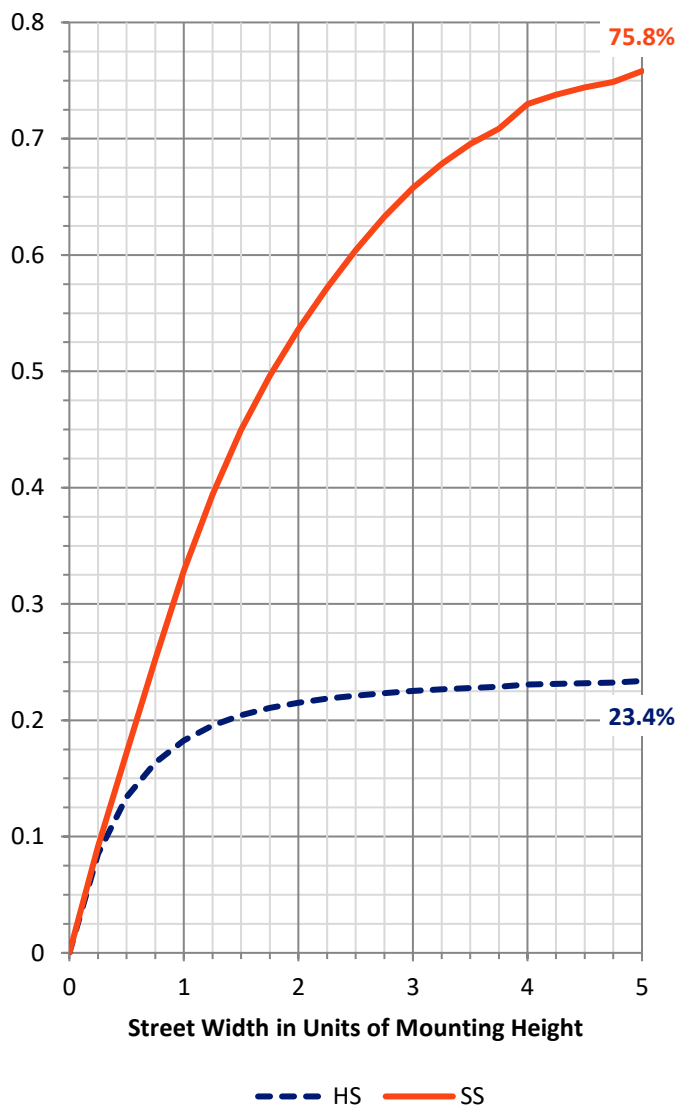
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12936.5	0.0	12936.5
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	41424.3	0.0	41424.3
	% Fixture	76.2	0.0	76.2
Total	Lumens	54360.9	0.0	54360.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	685.9	1.3
10°-20°	1978.3	3.6
20°-30°	3322.1	6.1
30°-40°	5163.0	9.5
40°-50°	7663.3	14.1
50°-60°	10579.6	19.5
60°-70°	12835.5	23.6
70°-80°	10607.5	19.5
80°-90°	1525.7	2.8
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°	54360.9	100.0
0°-180°	54360.9	100.0

Coefficient of Utilization



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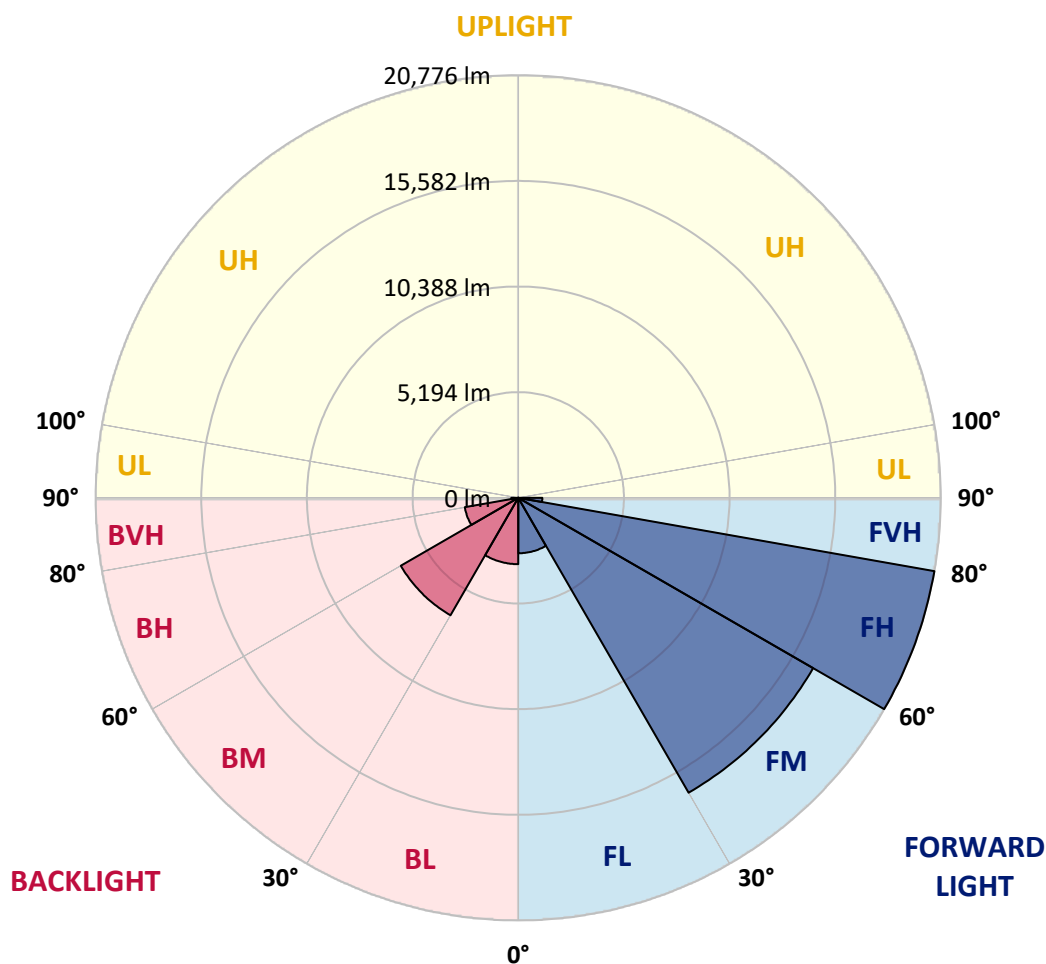
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2726.1	5.0			
FM	(30°-60°)	16740.2	30.8			
FH	(60°-80°)	20775.9	38.2			G5
FVH	(80°-90°)	1182.1	2.2			G5
BL	(0°-30°)	3260.2	6.0	B4/5000		
BM	(30°-60°)	6665.7	12.3	B4/8500		
BH	(60°-80°)	2667.1	4.9	B4/5000		G4/5000
BVH	(80°-90°)	343.5	0.6			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	7244.0	7244.0	7244.0	7244.0	7244.0	7244.0	7244.0	7244.0	7244.0	7244.0	7244.0
2.5°	6679.7	6720.8	6738.5	6729.6	6773.7	6767.9	6829.6	6906.0	7011.8	7114.6	7264.5
5°	6165.5	6209.6	6247.7	6282.9	6368.2	6394.7	6491.6	6638.6	6832.5	7029.4	7276.3
7.5°	5686.4	5724.6	5783.4	5848.0	5992.0	6018.5	6180.1	6409.3	6679.7	6967.7	7308.6
10°	5295.6	5333.8	5395.5	5469.0	5648.3	5680.5	5886.3	6191.9	6544.5	6908.9	7343.9
12.5°	5128.1	5139.9	5175.1	5248.5	5404.3	5424.9	5651.1	6000.9	6412.3	6864.8	7396.8
15°	5119.3	5142.7	5145.7	5183.9	5313.2	5322.0	5530.7	5877.5	6330.0	6856.0	7476.1
17.5°	5207.4	5225.0	5198.6	5222.1	5330.8	5345.6	5510.1	5818.7	6303.5	6894.3	7611.3
20°	5442.5	5457.2	5377.9	5345.6	5424.9	5436.6	5598.2	5856.8	6330.0	6973.6	7796.5
22.5°	5942.1	5950.9	5756.9	5624.7	5630.6	5636.5	5777.5	6012.6	6432.9	7117.6	8031.5
25°	6720.8	6715.0	6406.5	6150.7	6003.8	5971.4	6065.5	6265.3	6606.2	7308.6	8334.2
27.5°	7631.8	7587.8	7279.2	6897.2	6576.9	6529.9	6509.3	6594.5	6853.2	7561.3	8704.5
30°	8660.4	8619.3	8287.2	7787.6	7343.9	7267.5	7073.5	7029.4	7220.4	7905.2	9218.7
32.5°	9788.9	9762.4	9365.7	8760.4	8166.7	8078.5	7752.4	7634.8	7784.7	8425.3	9935.8
35°	10735.1	10711.7	10382.5	9759.5	9033.6	8924.9	8592.8	8460.6	8537.0	9092.4	10873.3
37.5°	11590.3	11578.6	11296.4	10805.7	10056.3	9924.0	9550.8	9506.8	9492.1	9971.1	12010.5
40°	12383.7	12354.4	12060.6	11802.0	11246.5	11126.0	10796.8	10758.7	10647.0	11052.6	13297.7
42.5°	13262.5	13186.0	12759.9	12639.5	12489.6	12389.7	12192.8	12198.6	11951.8	12272.1	14661.3
45°	13979.5	13935.4	13497.5	13427.0	13588.6	13547.5	13718.0	13762.1	13283.1	13550.5	16077.7
47.5°	14749.4	14708.3	14338.0	14288.1	14726.0	14737.7	15340.1	15354.8	14582.0	14878.8	17497.2
50°	15698.7	15639.9	15272.5	15334.3	15825.1	15869.2	16971.1	16871.2	15778.0	16227.6	18904.8
52.5°	16324.6	16359.9	16280.5	16380.4	17050.5	17091.6	18575.7	18320.0	16962.3	17558.9	20286.0
55°	16786.0	16856.5	17103.4	17332.5	18343.5	18384.7	20089.1	19698.2	17943.9	18793.2	21585.0
57.5°	17379.6	17279.7	17741.1	18187.8	19571.9	19680.6	21561.4	21026.5	18813.7	19856.9	22475.4
60°	18231.9	18161.4	18519.8	19181.0	20947.2	21120.6	23119.0	22222.6	19451.4	20700.4	22648.7
62.5°	19959.8	19783.5	19839.3	20424.1	22681.1	22910.3	24876.3	23265.9	19768.8	21029.5	21720.1
65°	22542.9	22240.2	21958.2	22363.7	25123.2	25349.5	26859.9	24085.8	19651.2	20391.8	19254.5
67.5°	25796.1	25496.4	25149.6	25531.6	28720.2	28899.4	29307.9	24547.1	18725.5	17935.0	14896.4
70°	28479.2	28367.5	28781.9	30354.0	34465.3	34471.3	32446.5	24165.1	16189.5	12715.8	8619.3
72.5°	28123.5	28056.0	30239.4	35100.1	41706.3	41550.6	35417.5	21273.5	10905.6	5736.4	3229.7
75°	23071.9	23509.8	26892.3	35014.9	44307.2	44286.6	33598.5	13524.1	4510.9	2377.4	1669.2
77.5°	12372.1	13065.6	17458.9	25851.9	34588.8	35108.9	23621.4	4731.3	1936.6	1522.2	1154.9
80°	4034.9	4640.3	6958.9	13162.5	22475.4	22378.4	10123.9	1857.3	1325.3	1078.5	799.3
82.5°	1713.3	1783.8	3109.1	6215.4	11534.5	11355.3	3223.8	1066.7	931.6	737.6	493.7
85°	670.0	749.4	1372.4	2874.1	4995.8	4887.1	1163.8	529.0	596.6	482.0	293.9
87.5°	220.4	267.4	490.8	984.5	1554.6	1498.8	285.1	182.2	258.6	220.4	105.8
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°	7244.0	7244.0	7244.0	7244.0	7244.0	7244.0	7244.0	7244.0	7244.0	7244.0	7244.0
2.5°	7305.7	7352.7	7408.5	7490.8	7561.3	7620.2	7681.9	7720.0	7734.8	7778.8	7775.9
5°	7358.6	7461.4	7599.6	7734.8	7867.0	7946.3	8016.8	8052.1	8084.4	8108.0	8113.8
7.5°	7446.7	7579.0	7796.5	7972.8	8084.4	8149.1	8196.1	8184.3	8196.1	8201.9	8210.8
10°	7523.1	7708.3	7966.9	8134.4	8219.6	8222.6	8210.8	8169.7	8149.1	8152.0	8157.9
12.5°	7614.2	7819.9	8099.1	8240.2	8263.7	8199.1	8149.1	8078.5	8052.1	8040.3	8034.5
15°	7737.6	7972.8	8243.2	8296.0	8237.2	8155.0	8069.7	7955.1	7896.4	7849.3	7864.0
17.5°	7887.6	8146.2	8354.8	8316.5	8190.3	8055.1	7916.9	7743.6	7623.0	7573.1	7576.0
20°	8096.2	8328.3	8440.1	8272.5	8081.5	7875.8	7640.7	7429.1	7317.4	7267.5	7261.6
22.5°	8348.9	8572.3	8522.3	8196.1	7925.7	7596.6	7302.7	7147.0	7091.2	7055.9	7061.7
25°	8651.6	8842.6	8581.1	8084.4	7670.1	7226.4	7000.0	6950.1	6923.7	6897.2	6897.2
27.5°	9045.4	9148.2	8625.2	7919.9	7270.4	6832.5	6750.2	6759.1	6750.2	6706.2	6715.0
30°	9565.5	9545.0	8666.3	7652.4	6811.9	6477.0	6482.8	6521.0	6526.9	6497.5	6512.2
32.5°	10250.3	10041.6	8686.9	7305.7	6374.1	6165.5	6171.3	6212.4	6241.8	6191.9	6215.4
35°	11079.0	10620.5	8654.6	6870.8	6036.1	5868.6	5824.6	5836.3	5845.2	5798.1	5830.4
37.5°	12045.8	11270.0	8510.6	6388.8	5756.9	5577.7	5483.6	5404.3	5357.3	5313.2	5342.6
40°	13106.7	11978.3	8246.0	5918.6	5445.4	5269.1	5128.1	4978.2	4819.5	4760.7	4787.2
42.5°	14217.6	12707.0	7925.7	5469.0	5087.0	4943.0	4793.1	4575.6	4337.6	4217.1	4231.7
45°	15369.6	13453.4	7611.3	5025.3	4719.6	4657.9	4484.5	4222.9	3964.3	3811.6	3799.8
47.5°	16498.0	14158.7	7149.9	4578.6	4375.7	4443.4	4308.2	4067.2	3779.2	3538.2	3511.8
50°	17576.5	14820.0	6394.7	4125.9	4096.6	4378.7	4249.4	3902.6	3573.5	3264.9	3238.5
52.5°	18646.2	15354.8	5427.8	3714.5	3946.7	4361.1	4173.0	3791.0	3388.3	3065.1	3029.8
55°	19554.2	15631.0	4496.3	3361.9	3729.3	4211.2	4081.9	3658.7	3126.8	2783.0	2753.6
57.5°	20071.4	15407.7	3720.4	3015.1	3429.4	3964.3	3926.2	3376.6	2815.3	2550.8	2515.6
60°	19848.1	14502.6	3085.7	2712.5	3144.4	3696.9	3655.8	3097.4	2577.3	2327.5	2292.2
62.5°	18616.8	12777.5	2583.1	2448.0	2885.8	3423.6	3385.4	2882.9	2395.0	2154.0	2115.9
65°	16136.6	10394.2	2192.3	2227.5	2624.3	3094.5	3150.3	2703.6	2251.1	2016.0	1977.7
67.5°	12307.4	7529.0	1886.6	2036.6	2368.6	2771.2	2932.8	2574.3	2130.6	1907.2	1872.0
70°	7014.7	4275.9	1628.0	1851.4	2142.4	2471.5	2765.3	2471.5	2001.3	1816.1	1792.6
72.5°	2659.6	1963.1	1407.6	1666.2	1924.8	2218.7	2580.2	2309.8	1851.4	1713.3	1689.8
75°	1419.4	1196.1	1184.3	1448.8	1675.1	1971.9	2348.1	2151.2	1739.7	1810.3	1869.0
77.5°	966.9	846.3	990.4	1240.1	1401.8	1698.6	2101.1	1910.2	1507.6	1501.7	1384.2
80°	670.0	599.5	805.2	999.2	1084.3	1428.2	1833.7	1639.8	1228.4	1146.1	1096.1
82.5°	402.6	390.8	602.4	746.4	767.0	1102.0	1519.4	1375.3	1005.0	875.8	881.6
85°	220.4	232.2	385.0	437.9	446.7	770.0	1190.2	1063.8	772.8	649.4	655.4
87.5°	61.7	79.3	141.0	173.4	214.5	399.6	708.3	631.8	388.0	270.4	270.4
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)