

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: P967894

Luminaire Tested: **NAV-SB5A-830-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967894
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-830-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15801.4 lumens
Efficiency: N/A
Efficacy: 111.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

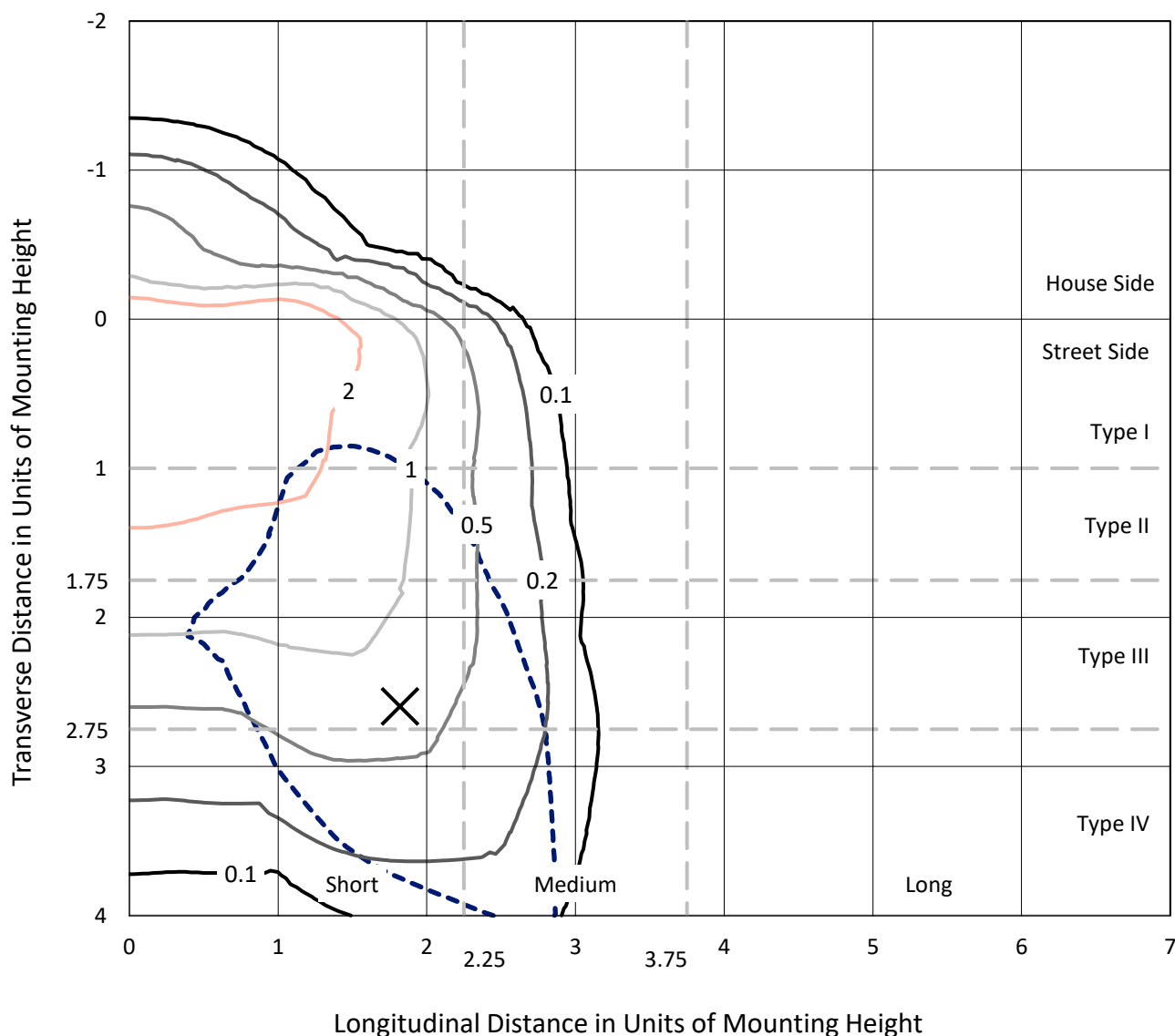
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

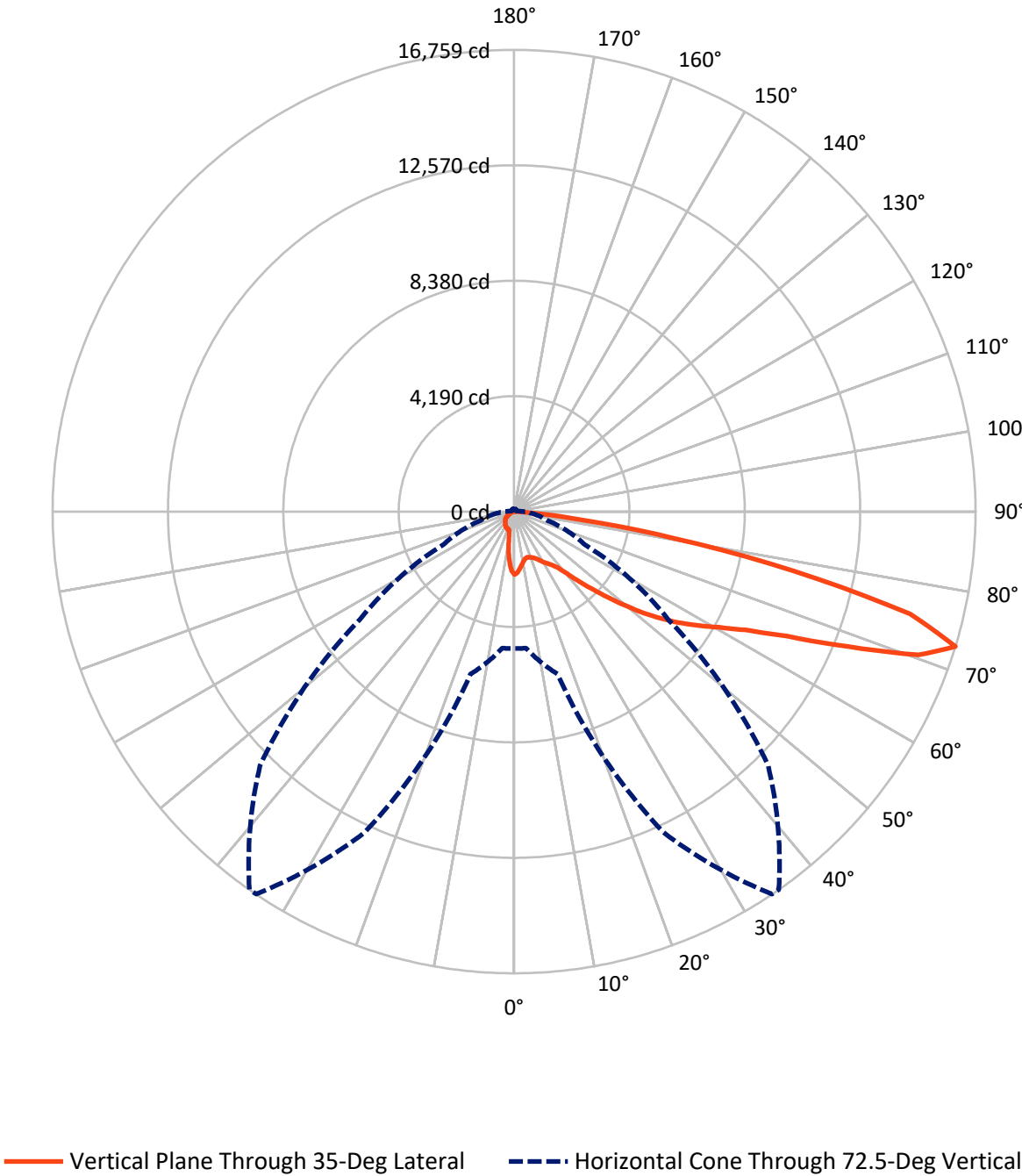
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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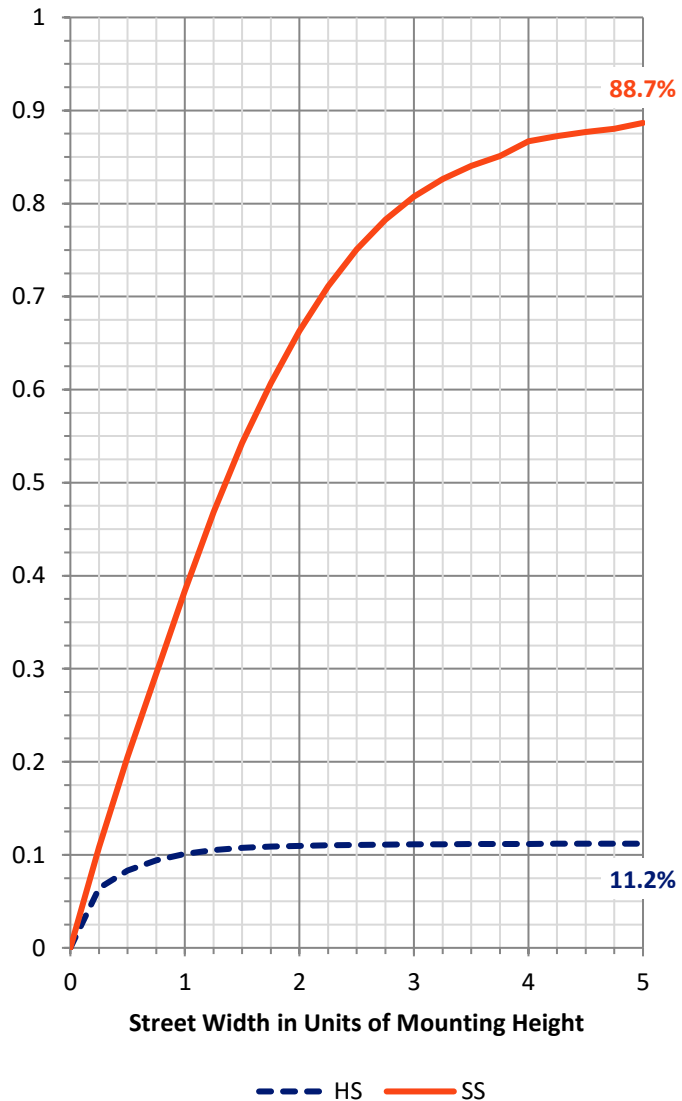
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1778.4	0.0	1778.4
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	14023.0	0.0	14023.0
	% Fixture	88.7	0.0	88.7
Total	Lumens	15801.4	0.0	15801.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.2	1.2
10°-20°	440.2	2.8
20°-30°	715.2	4.5
30°-40°	1193.3	7.6
40°-50°	2257.7	14.3
50°-60°	3587.4	22.7
60°-70°	4437.9	28.1
70°-80°	2758.6	17.5
80°-90°	222.9	1.4
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°	15801.4	100.0
0°-180°	15801.4	100.0

Coefficient of Utilization



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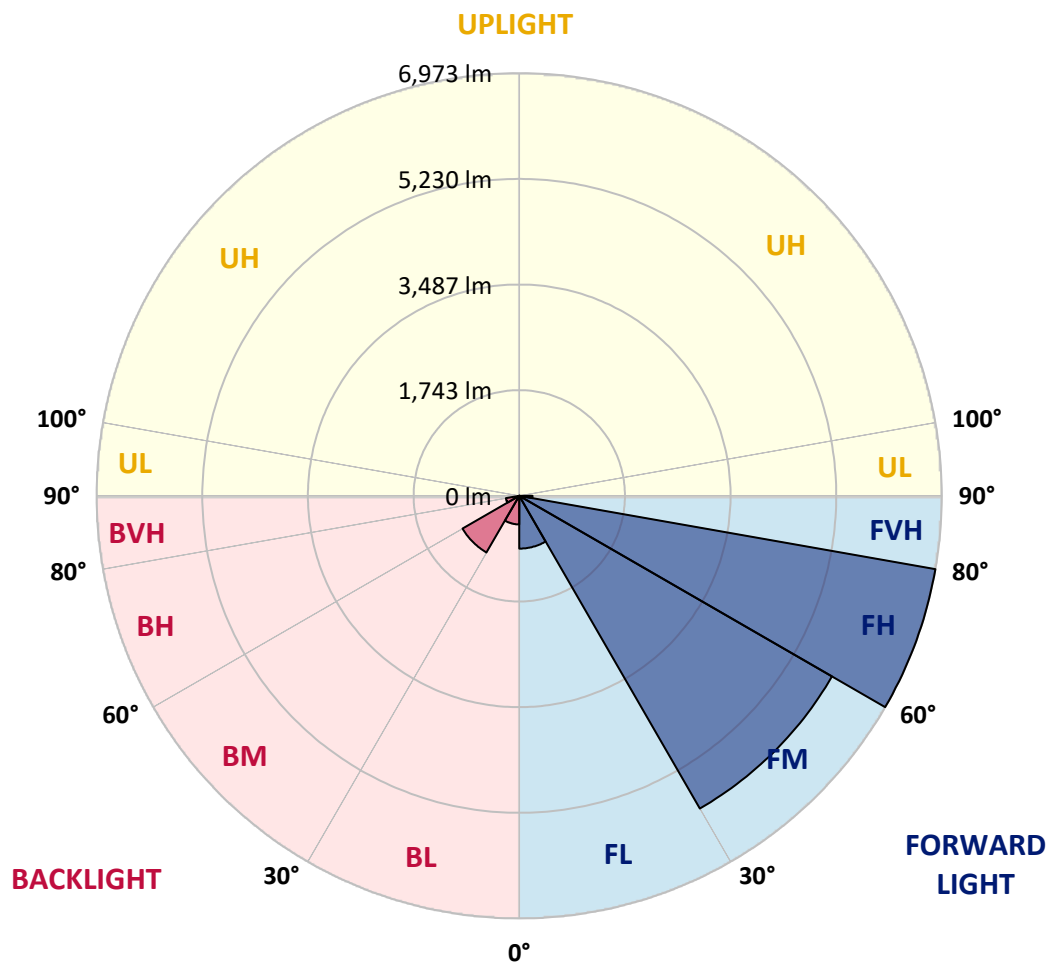
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	871.1	5.5			
FM	(30°-60°)	5958.7	37.7			
FH	(60°-80°)	6973.4	44.1			G3/7500
FVH	(80°-90°)	219.9	1.4			G2/225
BL	(0°-30°)	472.5	3.0	B1/500		
BM	(30°-60°)	1079.6	6.8	B2/2500		
BH	(60°-80°)	223.2	1.4	B1/500		G1/500
BVH	(80°-90°)	3.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	2290.2	2290.2	2290.2	2290.2	2290.2	2290.2	2290.2	2290.2	2290.2	2290.2	2290.2
2.5°	2188.3	2206.8	2210.3	2216.0	2216.0	2223.0	2234.6	2250.8	2277.4	2291.3	2300.6
5°	2016.9	2030.8	2048.2	2062.1	2088.6	2092.1	2137.3	2181.3	2242.7	2289.0	2321.4
7.5°	1844.4	1860.6	1883.7	1917.4	1952.1	1962.5	2030.8	2104.9	2202.1	2289.0	2343.5
10°	1722.8	1723.9	1744.9	1778.4	1833.9	1846.7	1930.1	2035.4	2157.0	2275.1	2364.3
12.5°	1654.6	1662.7	1671.9	1697.4	1750.6	1758.7	1847.9	1971.8	2111.8	2267.0	2388.6
15°	1654.6	1660.3	1666.1	1678.8	1721.7	1728.7	1807.4	1931.2	2088.6	2270.5	2427.9
17.5°	1671.9	1681.1	1676.5	1691.6	1736.8	1741.4	1810.9	1919.6	2087.5	2292.5	2488.2
20°	1713.6	1720.5	1711.2	1720.5	1765.7	1774.9	1846.7	1941.7	2107.2	2330.6	2563.4
22.5°	1779.6	1783.0	1761.1	1768.0	1814.2	1825.8	1909.3	2004.2	2154.7	2392.0	2664.1
25°	1862.9	1869.9	1836.3	1844.4	1888.4	1902.3	1998.3	2098.0	2230.0	2476.6	2792.6
27.5°	1959.0	1962.5	1933.6	1932.4	1989.1	2008.8	2106.1	2213.7	2330.6	2583.1	2954.8
30°	2069.0	2079.4	2051.6	2047.0	2118.8	2135.0	2231.1	2356.2	2478.9	2742.9	3185.2
32.5°	2155.9	2164.0	2147.8	2159.4	2232.2	2245.0	2382.8	2557.6	2711.6	2969.8	3498.9
35°	2280.9	2285.5	2248.4	2269.4	2352.7	2385.1	2590.1	2840.1	3004.5	3254.6	3908.7
37.5°	2733.6	2733.6	2576.1	2473.1	2553.0	2581.9	2873.7	3195.5	3365.8	3636.7	4425.1
40°	3360.0	3349.6	3119.2	2908.4	2898.0	2954.8	3277.7	3643.7	3832.4	4095.2	5006.4
42.5°	4028.0	4011.8	3698.1	3489.6	3454.9	3474.5	3744.3	4195.9	4388.1	4654.4	5631.6
45°	4620.8	4616.2	4329.1	4048.9	3986.3	4048.9	4326.7	4842.0	4979.8	5259.9	6255.7
47.5°	5117.5	5117.5	4908.0	4725.0	4692.7	4729.7	5115.3	5558.7	5546.0	5904.8	6863.5
50°	5689.5	5684.9	5485.7	5407.0	5440.6	5492.7	6022.9	6313.6	6131.8	6538.2	7406.5
52.5°	6090.1	6117.9	6049.5	6036.8	6208.2	6298.5	6944.6	7052.2	6656.2	7139.0	7813.0
55°	6407.4	6439.8	6518.5	6607.7	6937.6	7055.7	7837.3	7752.7	7095.0	7660.1	8046.8
57.5°	6856.5	6810.2	6931.9	7107.8	7641.6	7784.0	8702.1	8413.8	7448.2	8082.6	8072.3
60°	7401.9	7408.8	7429.7	7651.9	8344.3	8527.3	9554.2	9039.1	7675.1	8342.1	7789.8
62.5°	8057.2	8067.7	8110.5	8452.0	9287.9	9460.4	10462.0	9550.7	7779.3	8269.1	7060.3
65°	8012.0	8056.1	8534.3	9702.4	10722.5	10892.7	11521.4	9909.7	7621.9	7602.2	5748.5
67.5°	7298.8	7370.7	8170.7	11196.1	12885.3	13075.2	12801.9	9980.3	6942.2	5911.8	3750.2
70°	6363.3	6388.8	7351.0	12539.1	15389.7	15581.8	13948.2	9203.5	5268.1	3297.4	1680.0
72.5°	4969.3	4975.1	6104.0	12850.5	16748.9	16759.4	13048.6	6832.2	2833.2	1266.7	583.5
75°	3549.9	3515.1	4088.2	10421.5	14735.5	14853.6	9782.4	3204.9	1082.6	598.6	290.6
77.5°	1903.4	1941.7	2313.3	6180.4	10179.5	10381.0	5337.5	923.9	551.1	407.5	192.2
80°	588.1	620.6	948.2	2829.7	5765.9	5887.5	1978.7	411.0	384.4	290.6	126.2
82.5°	185.2	192.2	442.3	1189.1	2393.2	2448.7	573.1	232.7	262.8	192.2	74.1
85°	53.3	54.4	196.8	443.4	591.6	603.2	160.9	90.3	150.5	119.2	38.2
87.5°	5.7	18.6	74.1	74.1	52.1	50.9	17.3	19.7	42.8	15.1	7.0
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°	2290.2	2290.2	2290.2	2290.2	2290.2	2290.2	2290.2	2290.2	2290.2	2290.2	2290.2
2.5°	2294.8	2295.9	2280.9	2255.4	2227.6	2204.5	2175.6	2152.4	2136.2	2131.5	2139.7
5°	2311.0	2302.9	2260.0	2182.4	2089.9	2009.9	1920.8	1850.2	1803.9	1784.2	1791.1
7.5°	2335.3	2312.2	2218.4	2065.6	1888.4	1730.9	1571.1	1447.3	1368.6	1329.1	1335.0
10°	2356.2	2309.8	2148.9	1896.5	1625.5	1387.0	1171.7	1022.3	939.0	899.6	900.8
12.5°	2375.8	2308.7	2058.6	1696.2	1329.1	1037.4	837.1	763.0	739.8	731.7	729.4
15°	2412.8	2312.2	1945.1	1467.0	1033.9	783.8	710.9	709.7	714.3	712.1	710.9
17.5°	2463.8	2315.6	1816.6	1223.8	797.8	691.3	687.8	698.1	705.1	701.6	700.5
20°	2529.8	2329.5	1680.0	983.0	685.4	668.1	676.2	685.4	691.3	685.4	684.3
22.5°	2622.5	2353.8	1530.6	789.7	649.5	654.2	661.1	671.6	677.3	669.2	668.1
25°	2735.9	2392.0	1383.5	686.5	632.1	638.0	648.4	660.0	666.9	658.8	657.6
27.5°	2882.9	2453.4	1248.1	663.4	614.8	618.3	633.3	650.7	660.0	649.5	649.5
30°	3096.0	2554.1	1131.2	673.8	604.3	596.2	617.2	641.4	651.8	642.6	641.4
32.5°	3378.5	2696.6	1059.4	690.0	599.7	570.8	590.5	621.8	639.1	633.3	633.3
35°	3749.0	2913.0	1031.6	708.6	596.2	544.2	558.1	591.6	621.8	627.5	627.5
37.5°	4198.2	3214.1	1039.8	716.7	585.9	522.1	529.1	558.1	597.5	615.9	620.6
40°	4708.8	3565.0	1086.0	708.6	574.3	503.7	504.8	526.8	561.5	589.4	598.6
42.5°	5235.6	3974.7	1171.7	678.4	563.9	487.5	484.0	499.0	522.1	541.8	549.9
45°	5736.9	4396.2	1256.2	636.8	551.1	471.2	463.1	468.9	473.6	481.6	486.3
47.5°	6174.6	4692.7	1231.9	598.6	533.7	452.7	438.8	436.4	422.6	421.5	420.2
50°	6476.8	4757.4	1094.1	560.4	508.3	431.8	409.9	396.0	371.7	360.1	361.2
52.5°	6572.9	4501.6	893.8	522.1	466.6	404.1	372.8	350.9	320.7	310.3	309.1
55°	6445.5	4000.3	714.3	475.9	408.7	367.1	332.3	303.3	279.0	266.3	266.3
57.5°	6134.1	3362.3	565.0	421.5	347.4	325.3	290.6	261.7	240.9	228.1	225.8
60°	5617.7	2669.9	446.9	356.6	296.4	280.2	244.3	225.8	207.3	192.2	188.7
62.5°	4833.9	1905.8	350.9	282.5	247.7	229.3	208.4	194.5	172.5	151.7	148.2
65°	3772.1	1165.9	270.9	207.3	199.2	189.8	177.1	164.4	137.8	117.0	113.5
67.5°	2379.3	552.3	193.3	156.3	157.4	152.8	147.1	136.6	117.0	98.4	96.1
70°	1047.9	267.4	127.4	119.2	117.0	117.0	121.6	118.1	99.5	82.2	78.7
72.5°	356.6	143.6	94.9	90.3	84.6	83.3	101.9	98.4	79.8	63.7	60.2
75°	186.4	96.1	69.5	64.9	50.9	61.4	81.1	76.5	56.7	41.7	38.2
77.5°	121.6	68.3	47.5	41.7	28.9	40.5	60.2	53.3	33.6	20.8	18.6
80°	76.5	45.2	27.8	19.7	13.9	22.0	32.4	23.2	12.7	4.6	3.5
82.5°	40.5	23.2	10.5	7.0	5.7	7.0	8.1	5.7	2.4	0.0	0.0
85°	16.2	8.1	3.5	2.4	1.1	0.0	2.4	1.1	0.0	0.0	0.0
87.5°	5.7	1.1	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)