

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: P962077

Luminaire Tested: **NAV-SB2B-830-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962077
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-830-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10308.4 lumens
Efficiency: N/A
Efficacy: 139.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 73.9
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



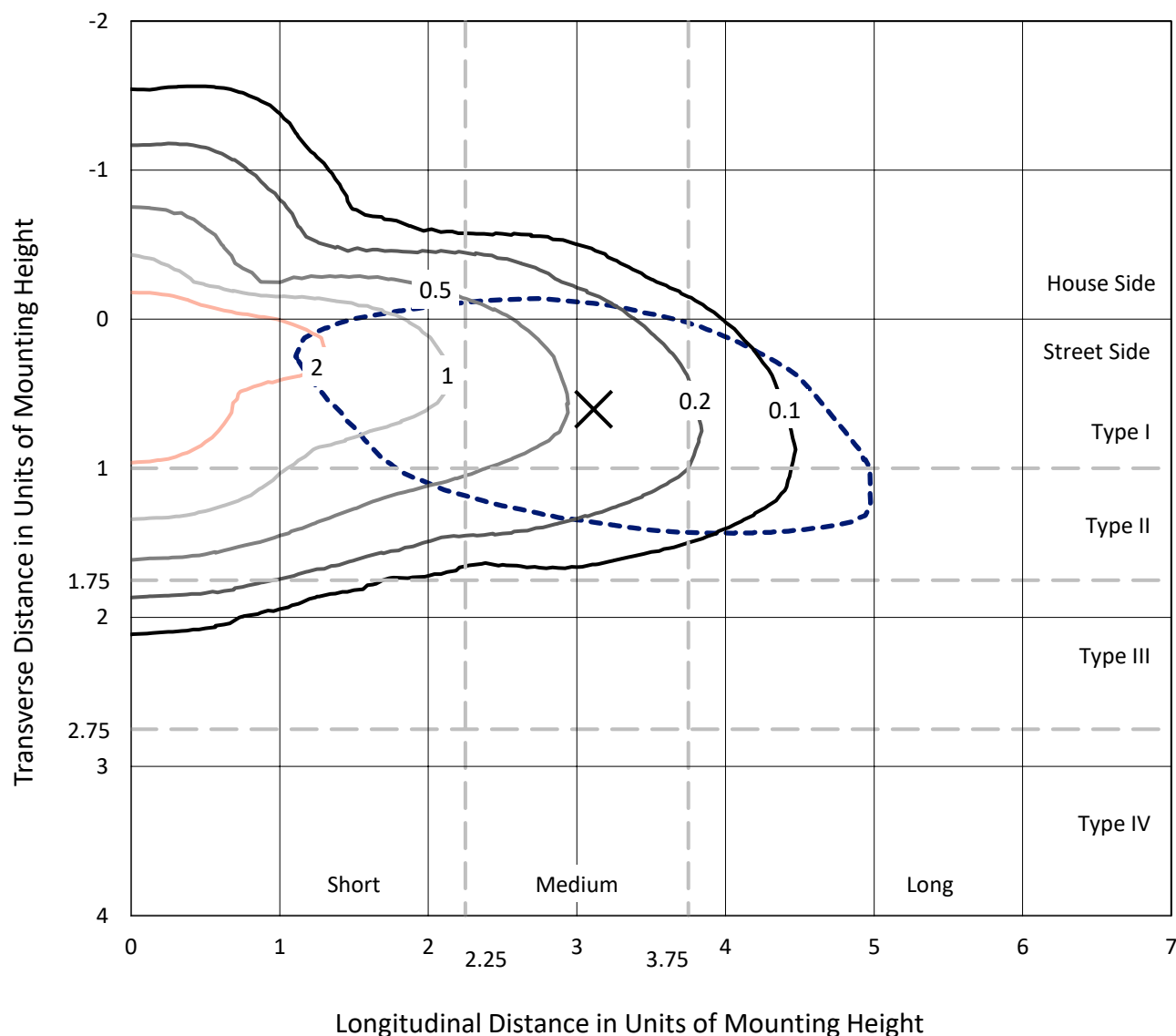
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

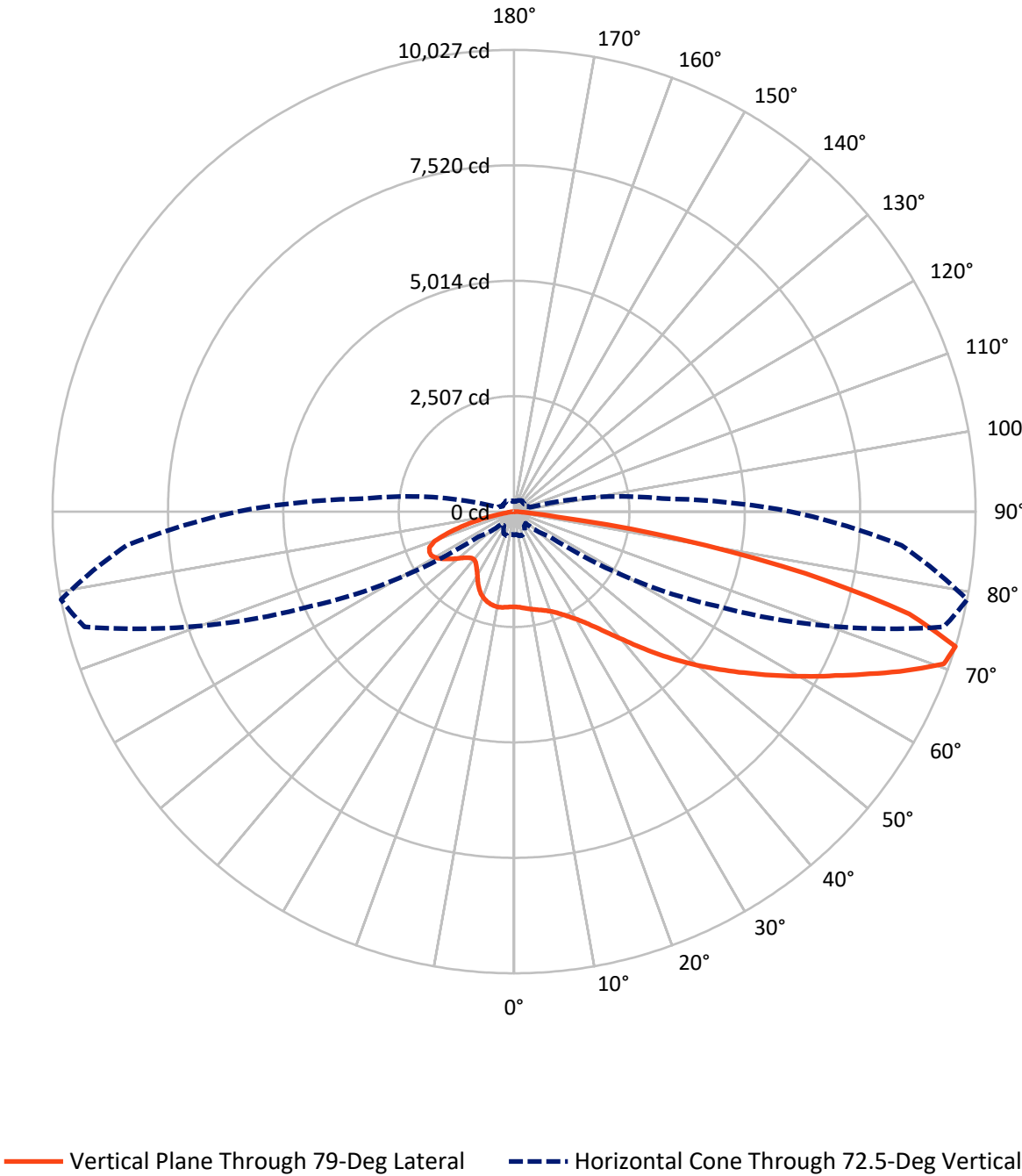
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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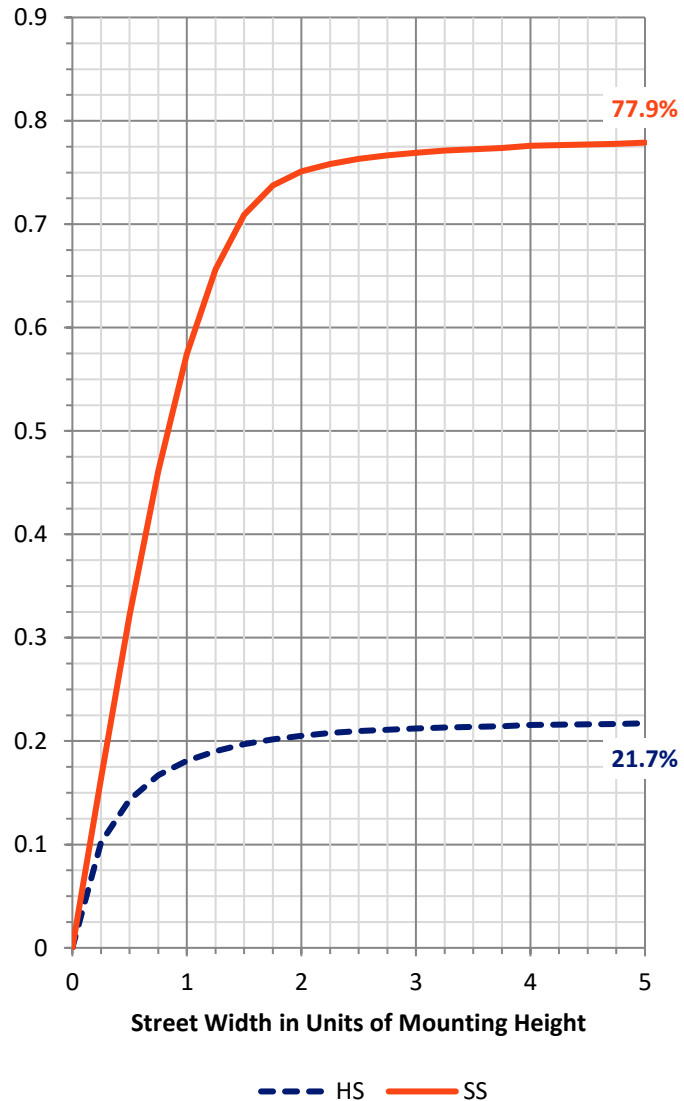
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2268.4	0.0	2268.4
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	8040.0	0.0	8040.0
	% Fixture	78.0	0.0	78.0
Total	Lumens	10308.4	0.0	10308.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.8	1.8
10°-20°	491.1	4.8
20°-30°	792.4	7.7
30°-40°	1189.3	11.5
40°-50°	1687.1	16.4
50°-60°	2130.6	20.7
60°-70°	2163.9	21.0
70°-80°	1474.8	14.3
80°-90°	191.3	1.9
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°	10308.4	100.0
0°-180°	10308.4	100.0

Coefficient of Utilization



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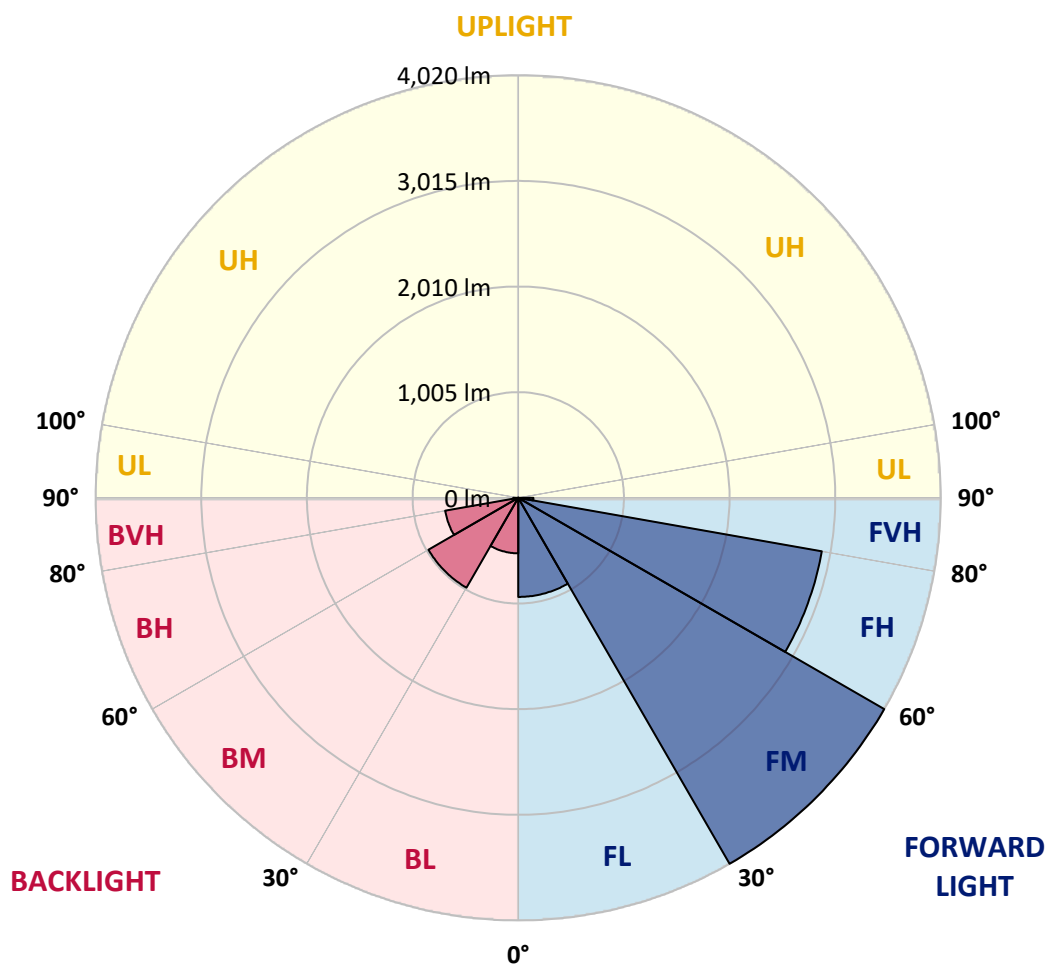
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	943.0	9.1			
FM	(30°-60°)	4020.5	39.0			
FH	(60°-80°)	2932.4	28.4			G2/5000
FVH	(80°-90°)	144.1	1.4			G2/225
BL	(0°-30°)	528.4	5.1	B2/1000		
BM	(30°-60°)	986.5	9.6	B1/1000		
BH	(60°-80°)	706.3	6.9	B2/1000		G2/1000
BVH	(80°-90°)	47.2	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3
2.5°	2070.4	2060.6	2066.6	2064.5	2067.1	2070.4	2071.5	2073.2	2078.6	2078.1	2077.5
5°	2066.1	2056.3	2064.5	2061.7	2068.8	2076.4	2082.9	2089.0	2097.7	2101.5	2096.0
7.5°	2056.8	2050.2	2058.4	2066.6	2079.7	2091.1	2100.4	2114.1	2126.6	2128.7	2132.6
10°	2002.7	1997.9	2017.0	2038.2	2074.2	2105.4	2125.4	2141.3	2155.0	2157.1	2162.5
12.5°	1946.7	1940.6	1961.8	1990.8	2049.2	2105.4	2147.9	2168.6	2180.6	2187.7	2195.9
15°	1937.4	1932.4	1944.4	1969.5	2018.0	2090.6	2163.1	2201.3	2211.6	2219.8	2223.1
17.5°	1982.0	1972.8	1977.7	1986.4	2014.7	2077.0	2175.2	2238.4	2254.2	2262.9	2262.9
20°	2085.7	2072.5	2065.0	2047.5	2042.6	2079.1	2174.0	2283.1	2303.8	2314.7	2317.4
22.5°	2223.6	2214.9	2198.5	2154.3	2106.4	2105.9	2194.7	2340.3	2379.0	2389.4	2382.8
25°	2390.5	2377.4	2356.7	2296.7	2204.6	2158.8	2229.6	2413.4	2478.2	2481.0	2461.9
27.5°	2582.4	2562.8	2534.4	2455.4	2331.1	2241.7	2283.1	2497.3	2592.2	2591.1	2551.8
30°	2784.7	2765.0	2735.1	2639.2	2482.7	2353.4	2357.2	2587.9	2727.4	2721.5	2654.4
32.5°	2932.5	2917.8	2911.7	2837.6	2657.1	2485.3	2442.3	2688.2	2894.3	2888.9	2795.1
35°	3045.9	3026.8	3033.9	2996.3	2847.4	2633.1	2546.4	2807.6	3097.1	3096.6	2979.9
37.5°	3158.2	3141.3	3147.4	3122.3	3023.5	2820.7	2673.5	2953.7	3348.6	3360.6	3203.5
40°	3260.7	3242.8	3266.8	3243.3	3160.4	3020.3	2817.9	3119.0	3639.7	3662.6	3473.9
42.5°	3322.3	3308.2	3348.0	3348.6	3279.3	3188.8	2976.7	3301.1	3976.7	4027.9	3806.5
45°	3343.7	3338.7	3398.7	3411.2	3384.6	3286.4	3119.5	3499.6	4339.8	4431.5	4185.5
47.5°	3320.7	3311.5	3394.3	3440.7	3461.9	3332.2	3237.9	3714.4	4710.6	4844.8	4598.9
50°	3205.2	3187.1	3310.3	3407.9	3483.8	3362.2	3357.3	3962.5	5132.2	5278.9	5014.3
52.5°	2997.4	2983.8	3123.9	3293.4	3435.8	3376.9	3491.4	4233.6	5532.3	5722.2	5440.2
55°	2731.8	2713.8	2868.2	3089.6	3316.4	3371.9	3625.5	4536.6	6004.6	6197.0	5880.2
57.5°	2310.9	2274.9	2470.0	2731.8	3121.7	3366.0	3765.1	4838.2	6484.5	6715.1	6349.8
60°	1696.9	1643.5	1882.8	2193.1	2741.1	3307.7	3937.9	5176.2	7060.2	7268.0	6862.3
62.5°	988.0	956.9	1113.5	1403.0	2066.1	2964.1	4035.0	5569.4	7626.2	7844.3	7366.2
65°	767.2	758.5	772.1	794.5	1149.9	2219.2	3735.7	5952.8	8346.0	8498.7	7891.2
67.5°	701.8	695.3	701.2	659.3	583.4	1236.1	2955.4	6049.9	9117.0	9209.7	8350.9
70°	623.8	616.1	635.8	599.8	459.1	562.2	1909.6	5697.6	9730.4	9904.4	8700.4
72.5°	508.2	499.5	545.3	528.9	386.6	361.0	959.1	4860.5	9666.1	10027.1	8450.1
75°	390.4	385.5	440.0	453.7	315.2	284.1	460.2	3613.0	8506.3	8869.9	7282.7
77.5°	303.2	299.4	327.2	376.8	254.1	220.3	283.0	2291.8	6410.2	6474.0	5018.7
80°	227.3	216.5	242.1	291.7	197.9	160.8	192.0	1336.5	4051.9	3673.0	2184.4
82.5°	142.3	136.8	158.2	194.6	139.6	110.7	124.8	738.3	1623.8	956.4	421.5
85°	81.3	79.0	86.2	111.2	75.7	63.8	71.4	326.1	296.6	204.0	127.1
87.5°	32.7	31.7	39.3	49.6	27.8	23.5	25.1	78.5	65.4	60.5	42.0
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°	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3
2.5°	2075.3	2075.3	2067.7	2055.6	2042.0	2033.3	2019.1	2015.4	2000.6	1996.3	2003.4
5°	2100.4	2096.0	2072.5	2038.8	1992.4	1949.9	1903.0	1873.6	1832.1	1817.4	1828.3
7.5°	2132.0	2120.0	2079.7	2005.5	1908.4	1813.0	1713.8	1638.6	1566.6	1541.0	1544.3
10°	2160.9	2144.0	2075.3	1945.6	1777.6	1612.4	1454.3	1343.6	1259.6	1225.2	1232.9
12.5°	2189.8	2158.8	2046.4	1845.7	1591.6	1367.6	1199.0	1112.9	1061.1	1019.7	1033.3
15°	2217.1	2173.5	2001.7	1712.2	1387.7	1160.3	1036.1	967.3	925.9	898.6	903.5
17.5°	2248.7	2186.0	1934.6	1542.6	1193.6	1016.9	915.5	874.1	865.9	862.6	864.8
20°	2292.9	2197.5	1846.3	1352.8	1050.7	902.4	850.0	846.2	845.7	844.1	849.5
22.5°	2340.3	2211.1	1729.6	1180.5	929.2	831.0	821.7	814.1	809.2	808.6	814.7
25°	2396.4	2215.4	1583.5	1039.2	825.5	797.1	786.3	774.8	771.5	771.5	774.8
27.5°	2451.0	2200.8	1413.4	916.7	767.2	766.1	751.9	748.1	747.5	749.2	753.6
30°	2505.5	2172.9	1244.4	803.2	733.4	733.4	728.5	731.2	733.4	738.8	742.7
32.5°	2579.1	2143.5	1103.1	719.2	704.0	698.5	703.4	708.9	711.0	718.1	724.2
35°	2687.1	2122.8	990.8	673.4	673.4	666.4	669.0	668.0	663.1	659.8	667.4
37.5°	2830.0	2121.6	898.1	652.1	647.8	646.7	647.3	640.1	621.0	598.2	598.7
40°	3001.7	2151.1	826.7	637.4	634.2	640.7	637.4	618.4	566.0	526.2	525.1
42.5°	3232.4	2235.1	780.8	619.4	629.2	637.4	624.3	558.3	523.0	496.2	495.1
45°	3504.0	2371.4	757.4	600.3	620.0	629.8	566.5	537.6	509.3	477.1	475.0
47.5°	3811.5	2543.1	751.9	582.3	599.2	605.3	542.0	528.9	496.7	461.9	459.1
50°	4146.2	2746.6	766.7	561.1	569.3	548.6	533.8	521.8	488.6	454.2	450.4
52.5°	4492.5	2970.7	796.1	532.2	539.3	516.4	530.5	520.2	483.7	437.3	434.1
55°	4832.8	3196.4	824.4	498.4	508.7	487.5	521.3	513.6	461.4	409.0	406.2
57.5°	5178.5	3421.0	852.3	468.4	479.3	459.7	506.6	496.2	436.2	382.7	381.7
60°	5537.8	3639.2	865.3	439.5	447.1	434.1	484.2	466.2	407.8	356.1	354.4
62.5°	5874.3	3820.8	844.1	410.6	415.5	410.0	454.8	430.8	379.6	326.1	325.5
65°	6211.8	3928.7	778.7	382.2	383.3	380.6	413.3	392.6	346.2	299.9	296.6
67.5°	6517.7	3989.2	674.6	351.7	349.0	347.9	374.6	351.2	314.1	273.8	270.5
70°	6582.6	3835.4	515.3	315.7	315.7	313.0	332.1	308.1	278.6	245.9	244.9
72.5°	6012.2	3226.4	365.9	274.8	279.2	273.8	289.6	269.4	242.6	220.9	214.3
75°	4848.0	2365.9	266.1	232.9	240.5	231.2	245.9	231.8	208.8	208.3	187.6
77.5°	3331.0	1463.0	193.0	192.0	197.4	185.4	202.3	194.6	173.9	164.7	154.3
80°	1421.6	583.4	140.6	148.3	148.3	137.5	157.0	159.2	141.2	136.8	136.8
82.5°	283.0	165.7	98.7	102.0	95.9	92.7	111.2	123.2	170.1	189.2	189.7
85°	85.1	61.1	59.4	55.7	49.1	49.6	65.4	123.8	152.7	87.2	75.2
87.5°	23.5	15.3	15.8	12.5	10.4	13.6	22.3	93.8	51.2	21.8	18.6
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)