

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: P961054

Luminaire Tested: **NAV-SB1D-835-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961054
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-SB1D-835-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9619.6 lumens
Efficiency: N/A
Efficacy: 120.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 79.6
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

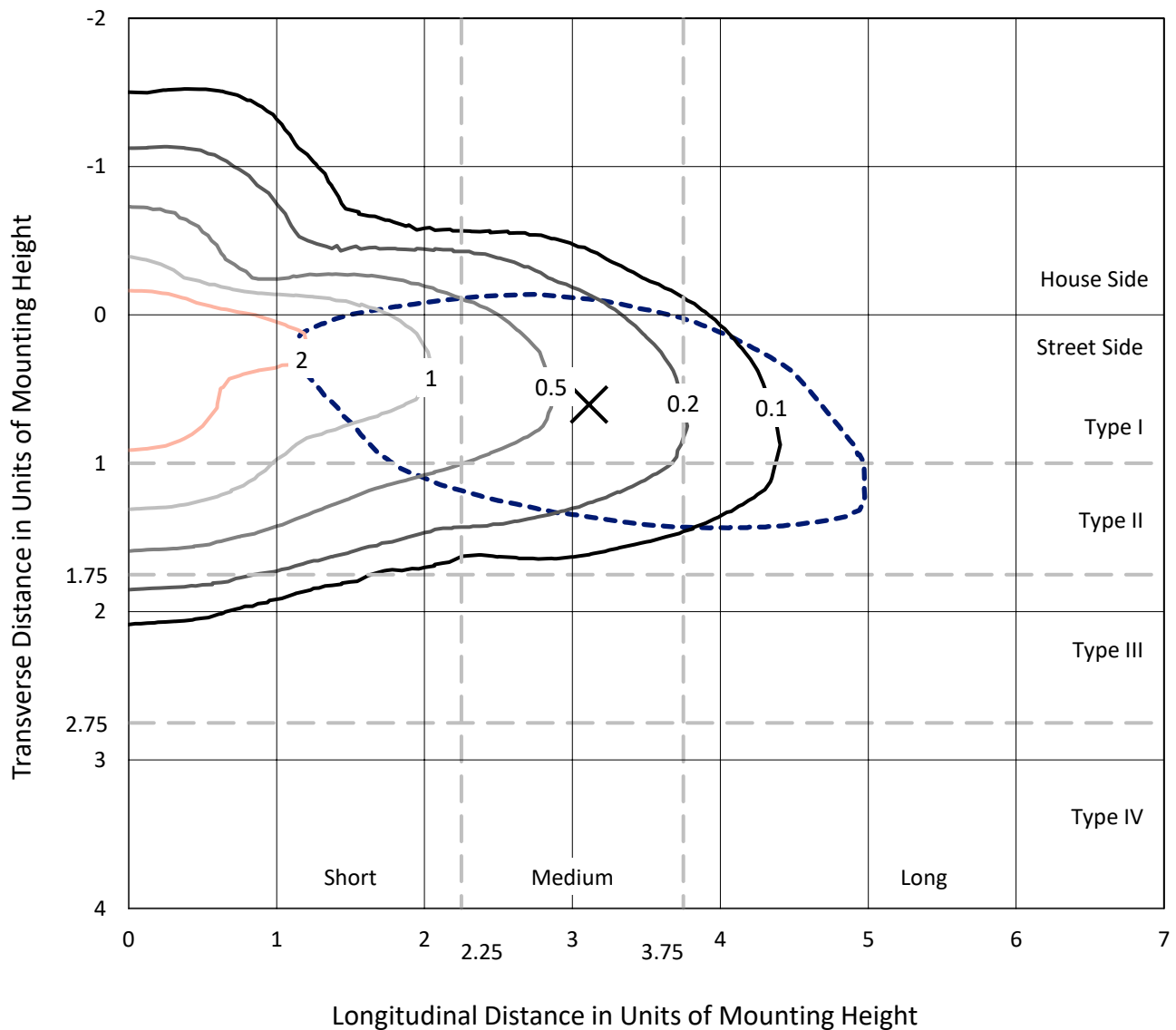


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Iso-Footcandle Lines of Horizontal Illumination

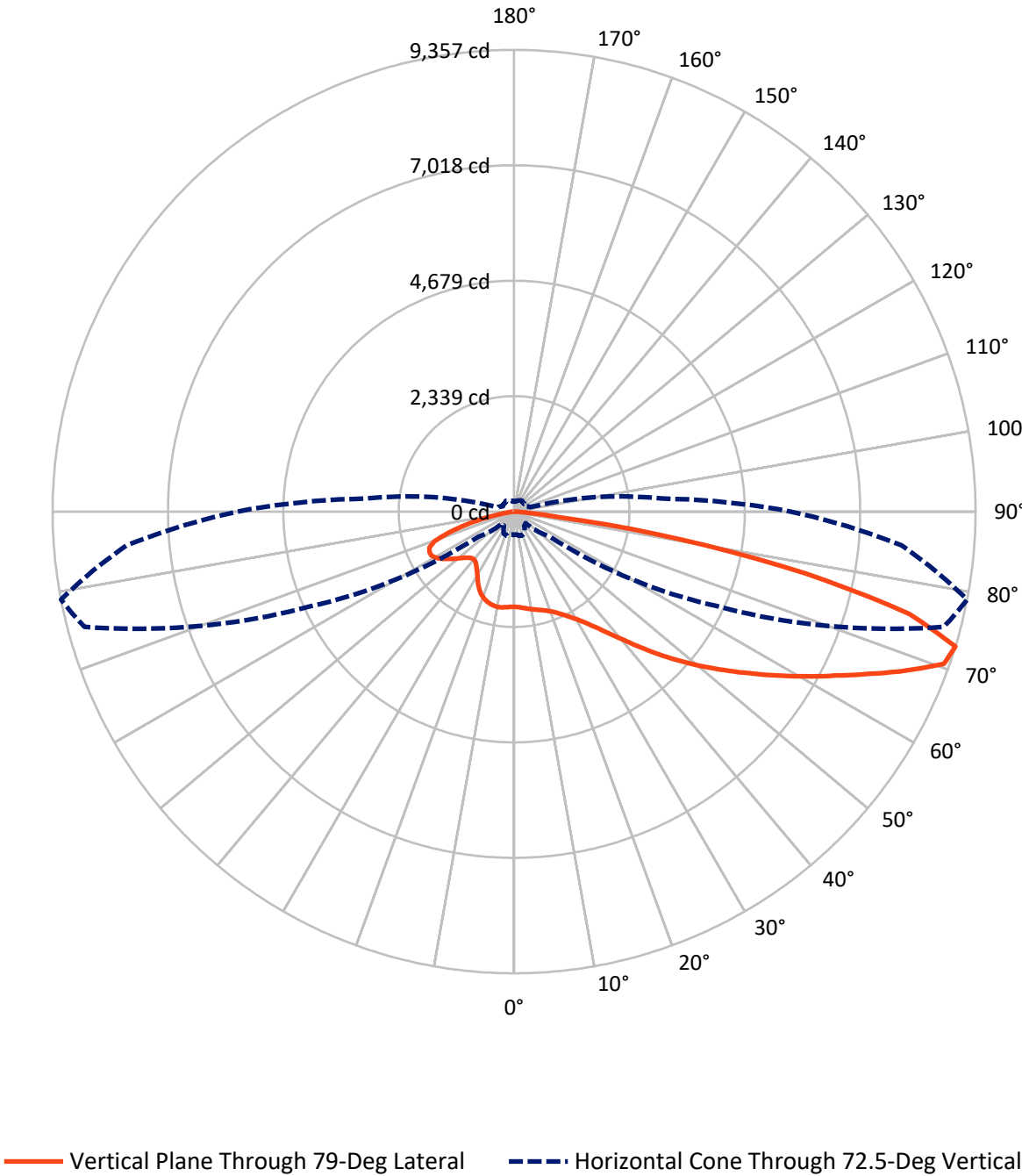
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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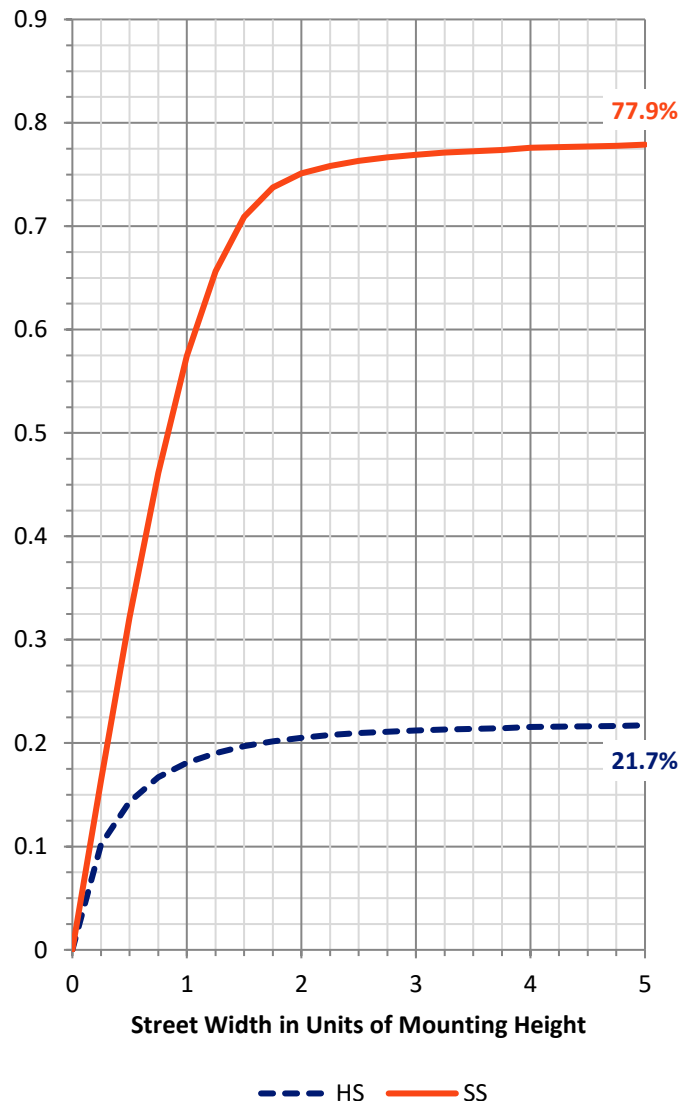
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2116.8	0.0	2116.8
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	7502.8	0.0	7502.8
	% Fixture	78.0	0.0	78.0
Total	Lumens	9619.6	0.0	9619.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.3	1.8
10°-20°	458.3	4.8
20°-30°	739.5	7.7
30°-40°	1109.8	11.5
40°-50°	1574.4	16.4
50°-60°	1988.2	20.7
60°-70°	2019.3	21.0
70°-80°	1376.2	14.3
80°-90°	178.6	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°	9619.6	100.0
0°-180°	9619.6	100.0

Coefficient of Utilization



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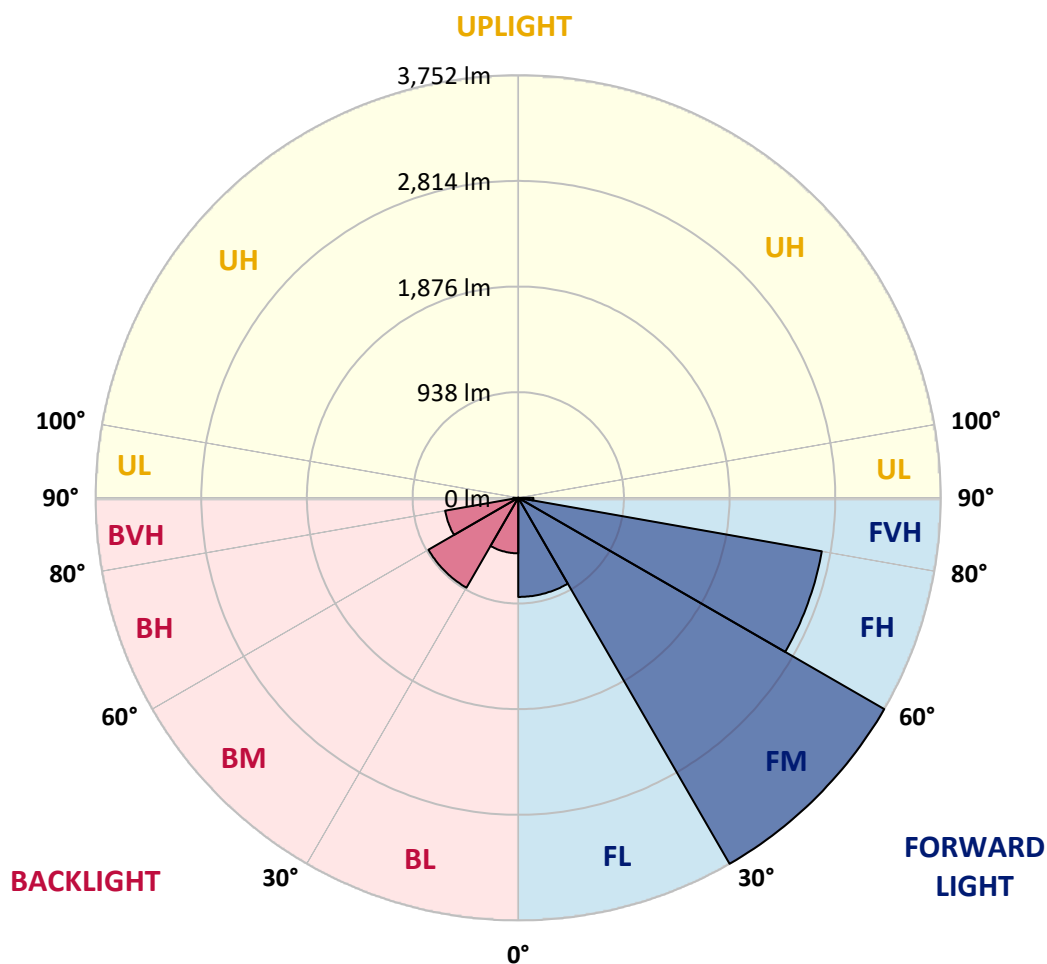
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	880.0	9.1			
FM	(30°-60°)	3751.9	39.0			
FH	(60°-80°)	2736.4	28.4			G2/5000
FVH	(80°-90°)	134.5	1.4			G2/225
BL	(0°-30°)	493.1	5.1	B1/500		
BM	(30°-60°)	920.6	9.6	B1/1000		
BH	(60°-80°)	659.1	6.9	B2/1000		G2/1000
BVH	(80°-90°)	44.1	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°	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0
2.5°	1932.0	1922.9	1928.5	1926.5	1929.0	1932.0	1933.0	1934.6	1939.7	1939.2	1938.7
5°	1928.0	1918.8	1926.5	1923.9	1930.6	1937.7	1943.8	1949.3	1957.5	1961.0	1956.0
7.5°	1919.3	1913.3	1920.8	1928.5	1940.7	1951.4	1960.0	1972.8	1984.5	1986.6	1990.0
10°	1869.0	1864.4	1882.2	1902.1	1935.6	1964.6	1983.5	1998.2	2010.9	2013.0	2018.0
12.5°	1816.6	1811.0	1830.9	1857.8	1912.2	1964.6	2004.3	2023.7	2034.8	2041.5	2049.1
15°	1807.9	1803.3	1814.6	1837.9	1883.2	1950.9	2018.5	2054.2	2063.8	2071.5	2074.5
17.5°	1849.6	1841.0	1845.5	1853.7	1880.2	1938.2	2029.8	2088.7	2103.5	2111.7	2111.7
20°	1946.3	1934.1	1927.0	1910.7	1906.1	1940.2	2028.8	2130.5	2149.8	2160.0	2162.5
22.5°	2075.0	2066.9	2051.6	2010.4	1965.6	1965.1	2048.1	2184.0	2220.0	2229.8	2223.6
25°	2230.7	2218.5	2199.2	2143.3	2057.3	2014.5	2080.6	2252.1	2312.7	2315.3	2297.4
27.5°	2409.9	2391.5	2365.1	2291.3	2175.3	2091.8	2130.5	2330.4	2419.0	2418.0	2381.4
30°	2598.7	2580.3	2552.4	2462.8	2316.7	2196.2	2199.8	2415.0	2545.2	2539.6	2477.0
32.5°	2736.5	2722.8	2717.2	2648.0	2479.6	2319.3	2279.1	2508.6	2700.9	2695.9	2608.3
35°	2842.4	2824.6	2831.2	2796.1	2657.2	2457.2	2376.3	2620.0	2890.2	2889.7	2780.8
37.5°	2947.2	2931.4	2937.0	2913.7	2821.5	2632.2	2494.8	2756.4	3124.8	3136.0	2989.4
40°	3042.8	3026.1	3048.5	3026.6	2949.2	2818.4	2629.6	2910.6	3396.5	3417.9	3241.9
42.5°	3100.3	3087.1	3124.3	3124.8	3060.1	2975.7	2777.7	3080.5	3711.0	3758.8	3552.2
45°	3120.2	3115.6	3171.6	3183.3	3158.3	3066.8	2911.1	3265.8	4049.9	4135.4	3905.9
47.5°	3098.9	3090.2	3167.6	3210.8	3230.6	3109.5	3021.5	3466.2	4395.9	4521.1	4291.6
50°	2991.0	2974.1	3089.1	3180.3	3251.0	3137.5	3132.9	3697.8	4789.2	4926.0	4679.3
52.5°	2797.1	2784.4	2915.1	3073.4	3206.2	3151.3	3258.1	3950.7	5162.7	5339.7	5076.7
55°	2549.3	2532.5	2676.5	2883.1	3094.8	3146.6	3383.3	4233.6	5603.4	5782.9	5487.3
57.5°	2156.5	2122.9	2305.0	2549.3	2913.2	3141.1	3513.5	4514.9	6051.1	6266.3	5925.4
60°	1583.5	1533.6	1757.1	2046.5	2558.0	3086.6	3674.8	4830.4	6588.5	6782.3	6403.8
62.5°	922.0	893.0	1039.0	1309.2	1928.0	2766.1	3765.4	5197.3	7116.7	7320.1	6874.0
65°	716.0	707.8	720.5	741.4	1073.2	2071.0	3486.0	5555.0	7788.3	7930.7	7363.9
67.5°	654.9	648.7	654.4	615.2	544.5	1153.5	2757.9	5645.6	8507.8	8594.3	7792.9
70°	582.1	575.0	593.3	559.8	428.4	524.6	1782.0	5316.9	9080.3	9242.5	8119.0
72.5°	474.3	466.1	508.8	493.5	360.8	336.8	895.0	4535.8	9020.2	9357.0	7885.5
75°	364.3	359.8	410.6	423.3	294.1	265.1	429.5	3371.5	7937.9	8277.3	6796.1
77.5°	282.9	279.3	305.3	351.6	237.1	205.6	264.0	2138.7	5981.9	6041.5	4683.3
80°	212.2	202.0	225.9	272.2	184.7	150.1	179.1	1247.1	3781.2	3427.5	2038.4
82.5°	132.8	127.7	147.6	181.6	130.3	103.3	116.5	689.0	1515.4	892.5	393.3
85°	75.8	73.8	80.4	103.8	70.7	59.6	66.6	304.3	276.9	190.3	118.6
87.5°	30.5	29.5	36.6	46.3	25.9	21.8	23.4	73.3	61.1	56.5	39.2
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°	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0
2.5°	1936.6	1936.6	1929.6	1918.3	1905.6	1897.5	1884.3	1880.7	1866.9	1862.8	1869.5
5°	1960.0	1956.0	1934.1	1902.5	1859.4	1819.6	1775.8	1748.3	1709.7	1696.0	1706.1
7.5°	1989.5	1978.4	1940.7	1871.5	1780.9	1691.9	1599.3	1529.1	1461.9	1438.0	1441.0
10°	2016.5	2000.8	1936.6	1815.6	1658.9	1504.6	1357.1	1253.8	1175.5	1143.4	1150.5
12.5°	2043.5	2014.5	1909.7	1722.4	1485.3	1276.1	1118.9	1038.5	990.3	951.5	964.2
15°	2069.0	2028.3	1868.0	1597.8	1295.0	1082.8	966.8	902.7	864.0	838.6	843.2
17.5°	2098.5	2040.0	1805.3	1439.5	1113.9	948.9	854.3	815.7	808.0	805.0	807.0
20°	2139.7	2050.6	1722.9	1262.4	980.5	842.1	793.2	789.8	789.2	787.7	792.7
22.5°	2184.0	2063.3	1614.1	1101.7	867.0	775.5	766.8	759.7	755.1	754.6	760.2
25°	2236.3	2067.4	1477.6	969.9	770.4	743.9	733.8	723.0	720.0	720.0	723.0
27.5°	2287.3	2053.7	1318.9	855.4	716.0	714.9	701.7	698.1	697.6	699.2	703.3
30°	2338.1	2027.8	1161.2	749.5	684.4	684.4	679.8	682.3	684.4	689.5	693.0
32.5°	2406.8	2000.3	1029.4	671.2	656.9	651.8	656.4	661.5	663.5	670.1	675.8
35°	2507.6	1980.9	924.6	628.4	628.4	621.8	624.3	623.3	618.8	615.7	622.8
37.5°	2640.9	1979.9	838.0	608.5	604.5	603.5	604.0	597.4	579.5	558.2	558.7
40°	2801.1	2007.4	771.4	594.8	591.7	597.9	594.8	577.1	528.2	491.1	490.1
42.5°	3016.4	2085.8	728.7	578.0	587.2	594.8	582.6	521.0	488.0	463.1	462.1
45°	3269.9	2213.0	706.7	560.3	578.5	587.7	528.7	501.7	475.3	445.3	443.2
47.5°	3556.7	2373.2	701.7	543.5	559.2	564.8	505.8	493.5	463.5	431.0	428.4
50°	3869.2	2563.0	715.4	523.6	531.3	511.9	498.2	487.0	455.9	423.8	420.4
52.5°	4192.4	2772.1	742.9	496.6	503.3	481.9	495.1	485.4	451.3	408.1	405.1
55°	4509.9	2982.9	769.4	465.0	474.8	454.9	486.5	479.3	430.5	381.6	379.0
57.5°	4832.5	3192.5	795.3	437.1	447.3	429.0	472.7	463.1	407.0	357.2	356.2
60°	5167.7	3396.0	807.5	410.1	417.3	405.1	451.8	435.0	380.6	332.3	330.8
62.5°	5481.7	3565.5	787.7	383.1	387.8	382.6	424.4	402.0	354.1	304.3	303.8
65°	5796.7	3666.2	726.6	356.7	357.7	355.2	385.7	366.3	323.1	279.8	276.9
67.5°	6082.1	3722.7	629.5	328.2	325.6	324.6	349.5	327.7	293.0	255.4	252.4
70°	6142.7	3579.2	480.8	294.6	294.6	292.1	309.9	287.5	260.0	229.5	228.5
72.5°	5610.4	3010.8	341.4	256.5	260.6	255.4	270.2	251.3	226.4	206.1	200.0
75°	4524.1	2207.8	248.4	217.3	224.4	215.8	229.5	216.3	194.9	194.3	175.1
77.5°	3108.5	1365.2	180.1	179.1	184.2	173.0	188.8	181.6	162.4	153.6	144.0
80°	1326.6	544.5	131.3	138.4	138.4	128.2	146.6	148.6	131.8	127.7	127.7
82.5°	264.0	154.7	92.1	95.1	89.6	86.5	103.8	115.0	158.8	176.6	177.1
85°	79.3	57.0	55.5	51.9	45.8	46.3	61.1	115.5	142.5	81.4	70.2
87.5°	21.8	14.2	14.8	11.7	9.6	12.7	20.9	87.5	47.9	20.4	17.3
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)