

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: P964202

Luminaire Tested: **NAV-SB3B-830-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964202
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-830-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12955 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 109.2
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

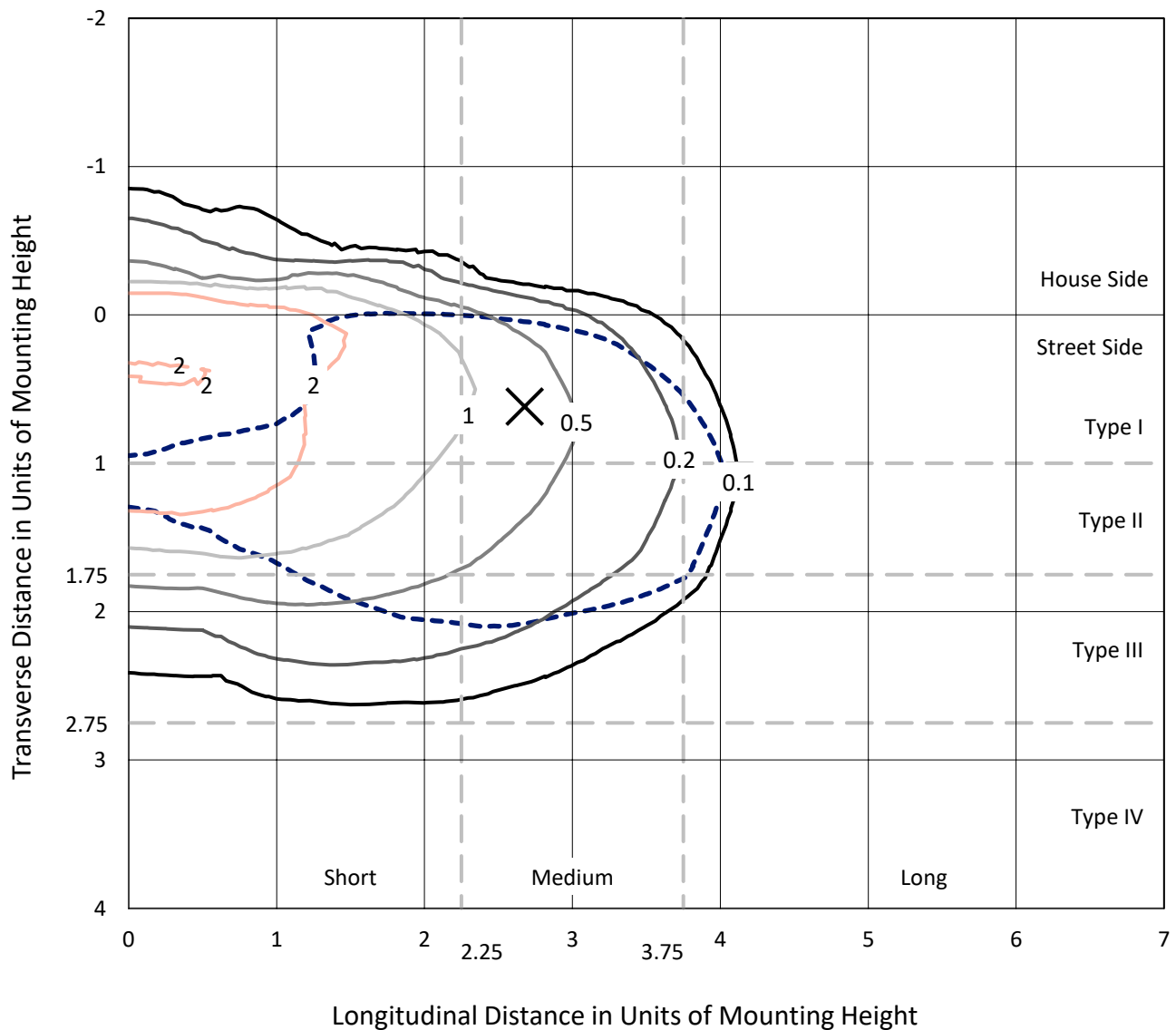


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Iso-Footcandle Lines of Horizontal Illumination

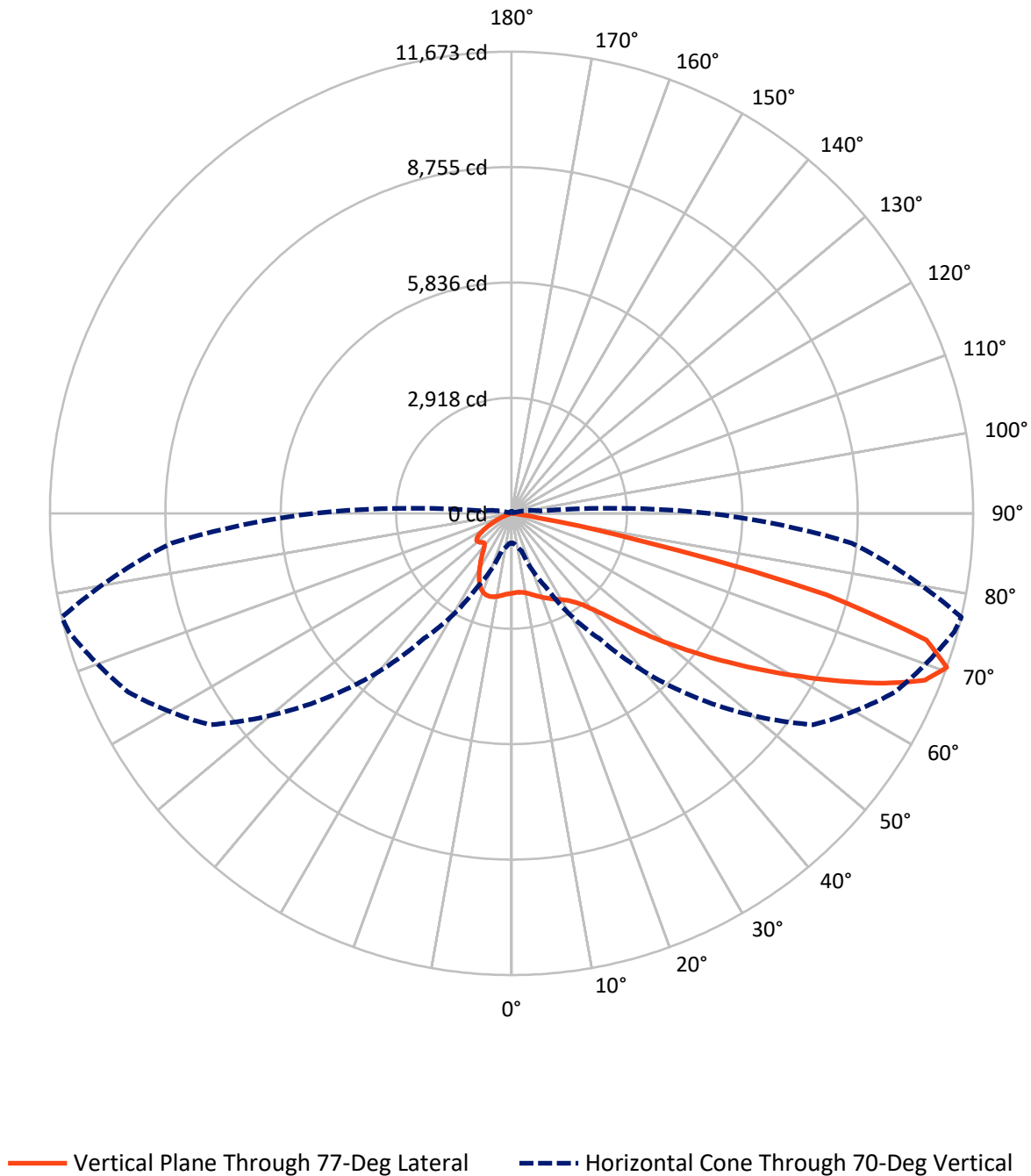
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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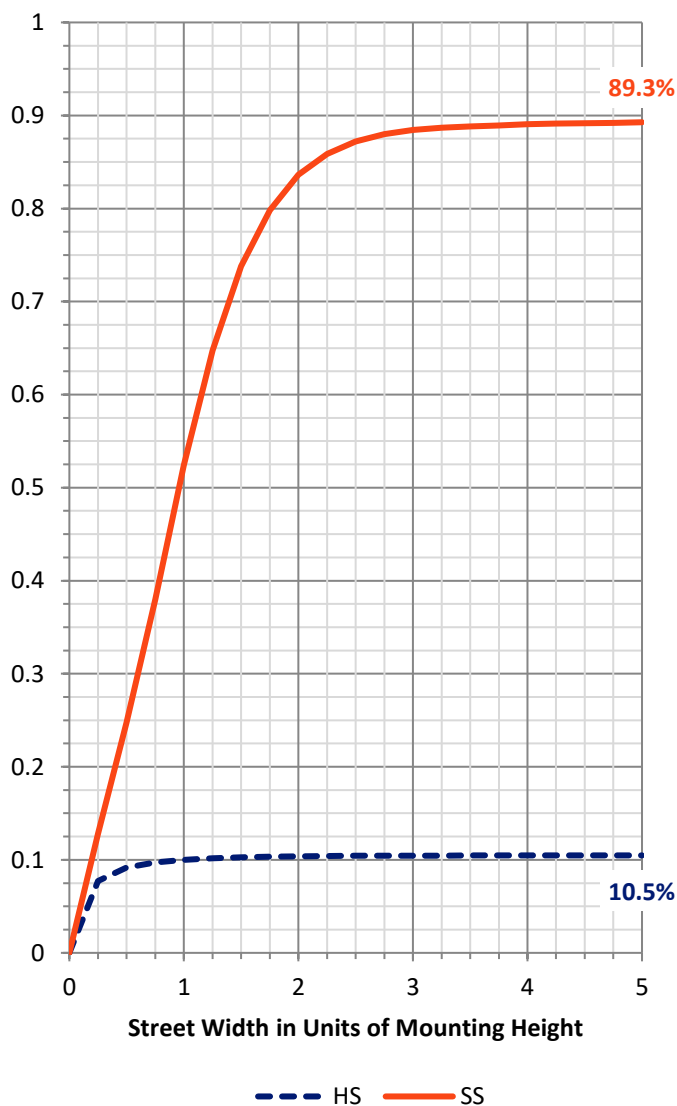
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1365.6	0.0	1365.6
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	11589.3	0.0	11589.3
	% Fixture	89.5	0.0	89.5
Total	Lumens	12955.0	0.0	12955.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.2	1.3
10°-20°	413.4	3.2
20°-30°	639.5	4.9
30°-40°	1160.3	9.0
40°-50°	2190.3	16.9
50°-60°	3164.7	24.4
60°-70°	3368.8	26.0
70°-80°	1785.2	13.8
80°-90°	58.6	0.5
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°	12955.0	100.0
0°-180°	12955.0	100.0

Coefficient of Utilization



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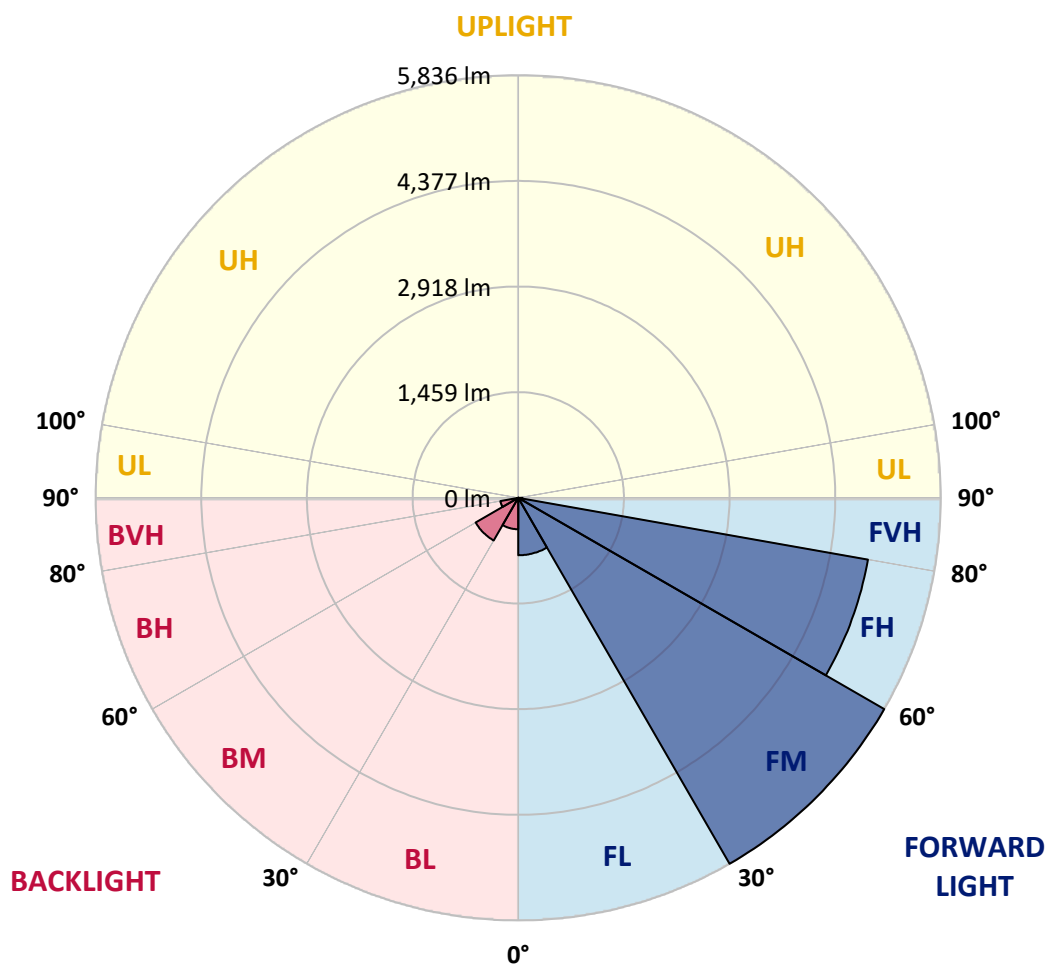
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	793.1	6.1			
FM	(30°-60°)	5835.5	45.0			
FH	(60°-80°)	4903.6	37.9			G2/5000
FVH	(80°-90°)	57.0	0.4			G1/100
BL	(0°-30°)	433.9	3.3	B1/500		
BM	(30°-60°)	679.8	5.2	B1/1000		
BH	(60°-80°)	250.4	1.9	B1/500		G1/500
BVH	(80°-90°)	1.6	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2020.8	2020.8	2020.8	2020.8	2020.8	2020.8	2020.8	2020.8	2020.8	2020.8	2020.8
2.5°	1897.2	1914.4	1911.9	1923.4	1927.5	1943.8	1960.2	1982.2	2006.8	2006.0	2022.4
5°	1790.1	1807.2	1811.3	1826.9	1846.4	1871.9	1905.4	1949.5	1995.4	2002.7	2035.4
7.5°	1663.3	1681.2	1691.9	1722.9	1758.9	1811.3	1866.1	1930.8	2006.8	2017.5	2080.4
10°	1536.4	1552.8	1566.7	1610.9	1668.1	1745.9	1835.1	1928.3	2030.5	2046.1	2135.3
12.5°	1457.9	1473.4	1489.0	1527.5	1598.6	1693.5	1814.6	1939.7	2069.8	2091.9	2209.7
15°	1430.1	1444.0	1456.2	1490.6	1556.9	1664.9	1810.5	1963.5	2119.7	2149.2	2299.7
17.5°	1434.2	1441.6	1449.7	1475.9	1540.5	1651.8	1817.8	2004.4	2178.6	2204.8	2389.7
20°	1457.9	1462.0	1462.8	1480.8	1538.0	1650.1	1832.6	2043.6	2234.3	2269.5	2478.9
22.5°	1488.2	1489.7	1488.2	1500.4	1553.6	1662.4	1852.2	2091.1	2296.4	2329.2	2568.9
25°	1629.6	1598.6	1559.3	1535.6	1579.7	1686.1	1881.7	2155.0	2364.4	2396.2	2656.4
27.5°	2069.0	1979.8	1839.2	1681.2	1633.7	1720.5	1922.6	2219.5	2433.0	2461.7	2750.5
30°	2782.4	2665.4	2426.5	2070.6	1807.2	1792.5	1975.8	2284.2	2505.9	2537.0	2851.1
32.5°	3497.4	3468.8	3193.1	2700.6	2197.5	1952.8	2064.1	2371.7	2602.4	2627.0	2987.0
35°	4220.6	4162.5	3936.7	3449.9	2798.8	2279.3	2211.3	2486.2	2729.3	2757.0	3184.9
37.5°	4774.6	4739.3	4599.5	4198.6	3512.2	2783.2	2463.4	2663.8	2913.3	2944.4	3438.6
40°	5263.8	5247.4	5199.9	4935.7	4309.8	3442.7	2855.2	2938.7	3168.6	3205.4	3749.4
42.5°	5648.3	5686.7	5713.8	5640.1	5132.1	4195.3	3382.1	3324.8	3524.5	3562.1	4145.4
45°	6041.8	6054.9	6163.6	6270.0	5948.5	4982.3	3976.1	3777.2	3967.1	4013.7	4619.9
47.5°	6294.5	6346.9	6538.4	6725.7	6634.9	5762.8	4614.1	4311.5	4480.0	4567.5	5151.6
50°	6313.4	6412.4	6675.8	7002.3	7134.8	6505.7	5308.0	4920.1	5099.3	5195.8	5719.4
52.5°	6000.0	6153.9	6562.0	7039.9	7404.7	7134.8	6025.4	5528.8	5758.7	5884.7	6308.5
55°	4600.3	4801.5	6134.2	6835.3	7415.4	7611.8	6724.1	6162.8	6493.4	6635.7	6945.0
57.5°	4008.0	4109.4	4822.8	6480.3	7218.3	7804.0	7355.7	6766.6	7292.7	7469.4	7546.3
60°	3334.6	3468.0	4044.8	5899.4	6950.7	7822.8	7913.6	7545.4	8159.1	8357.8	8097.7
62.5°	2266.2	2411.0	2984.5	4901.3	6585.0	7813.8	8371.0	8347.2	9122.0	9335.5	8564.8
65°	1403.8	1494.7	1872.7	4002.2	6073.6	7823.6	8849.5	9320.7	10138.1	10354.9	8926.4
67.5°	1109.4	1151.1	1348.3	3072.8	5192.5	7602.7	9327.3	10236.3	11094.5	11266.3	9036.9
70°	745.3	770.7	980.9	2060.0	3863.1	6583.4	9318.3	10696.0	11586.9	11672.8	8634.4
72.5°	392.7	412.4	573.5	954.0	2333.3	4679.6	7854.7	10146.3	11096.9	10967.6	7380.2
75°	196.4	229.1	386.1	484.3	996.5	2609.8	4877.6	7999.5	8734.2	8233.5	4735.3
77.5°	148.9	180.0	319.1	319.1	346.9	878.6	2065.8	4363.0	4024.4	3351.0	1390.0
80°	94.9	122.7	279.0	241.4	144.8	223.3	538.3	1222.3	855.0	650.4	252.8
82.5°	55.7	80.2	232.4	159.5	81.0	82.6	152.2	260.1	221.7	172.6	77.7
85°	22.1	52.4	159.5	63.0	31.9	20.5	45.8	55.7	45.8	34.3	19.7
87.5°	0.0	12.3	27.8	0.0	2.5	1.6	3.3	4.1	4.1	3.3	6.6
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°	2020.8	2020.8	2020.8	2020.8	2020.8	2020.8	2020.8	2020.8	2020.8	2020.8	2020.8
2.5°	2029.7	2031.3	2036.3	2037.1	2025.6	2010.9	2005.2	2002.7	1992.9	1992.1	1993.7
5°	2054.3	2061.7	2054.3	2033.0	1982.2	1911.1	1857.1	1812.9	1772.8	1760.5	1753.3
7.5°	2103.4	2110.8	2088.6	2005.2	1877.6	1736.0	1608.4	1518.4	1437.5	1407.1	1394.9
10°	2173.7	2183.6	2114.0	1945.4	1719.6	1492.2	1276.2	1124.1	1005.4	957.1	936.7
12.5°	2262.1	2266.2	2127.9	1854.6	1514.3	1189.5	883.6	720.8	615.2	575.9	563.6
15°	2359.4	2353.7	2129.5	1731.1	1234.5	841.0	576.8	473.7	431.1	418.1	418.1
17.5°	2461.7	2438.0	2096.8	1552.8	927.7	575.1	427.8	403.3	396.0	392.7	391.9
20°	2562.3	2509.2	2037.1	1319.6	665.9	429.5	388.6	381.2	377.2	375.6	373.9
22.5°	2653.9	2563.1	1934.8	1048.8	483.5	379.6	367.4	360.8	353.4	350.1	349.3
25°	2743.1	2594.3	1790.9	796.0	386.9	355.1	345.2	333.0	323.2	319.1	317.4
27.5°	2829.8	2613.9	1610.9	589.1	345.2	332.2	314.2	296.9	289.6	288.0	286.4
30°	2922.3	2620.4	1406.3	439.3	319.9	303.5	277.4	257.7	253.6	254.4	254.4
32.5°	3035.2	2630.3	1200.2	360.0	298.6	269.2	238.1	217.6	214.3	217.6	216.8
35°	3170.2	2649.8	1001.3	331.4	279.8	234.0	200.4	183.3	180.0	182.4	181.6
37.5°	3353.5	2681.8	815.7	325.6	264.2	204.5	168.5	154.7	154.7	155.5	154.7
40°	3597.2	2766.9	649.5	321.5	256.0	182.4	142.4	136.6	139.1	140.7	140.7
42.5°	3894.2	2947.7	537.5	316.6	247.0	172.6	129.3	126.8	130.9	132.5	132.5
45°	4227.2	3176.8	498.3	308.4	238.9	179.2	123.5	120.2	125.2	126.0	126.8
47.5°	4571.6	3401.0	493.3	299.4	230.7	189.0	121.9	114.5	120.2	121.1	121.9
50°	4920.1	3547.3	498.3	285.6	217.6	189.0	122.7	108.9	113.7	116.1	117.0
52.5°	5271.1	3614.5	495.0	255.2	194.7	177.5	122.7	103.9	108.9	110.5	110.5
55°	5611.5	3601.3	445.1	210.2	165.2	157.0	119.4	99.8	103.1	103.9	103.9
57.5°	5880.6	3418.9	352.6	163.6	134.2	130.9	108.9	94.9	97.4	96.6	96.6
60°	6021.4	3018.0	251.9	126.0	105.6	103.1	95.7	88.4	90.0	85.9	85.1
62.5°	6023.0	2487.9	168.5	99.8	84.3	81.8	81.8	79.3	77.7	69.5	67.0
65°	5894.5	1899.6	112.0	79.3	67.9	63.9	68.7	67.9	62.2	50.7	49.1
67.5°	5603.3	1245.2	85.1	62.2	52.4	49.9	54.8	57.3	53.2	42.5	41.7
70°	5004.4	724.9	70.3	48.3	39.3	36.8	44.2	49.1	44.2	34.3	32.7
72.5°	4156.9	391.0	57.3	36.0	27.0	24.5	35.2	40.1	35.2	25.3	24.5
75°	2697.3	209.4	44.2	23.7	13.9	15.6	26.1	29.4	24.5	16.4	14.8
77.5°	905.7	92.5	27.8	11.5	6.6	6.6	15.6	18.0	11.5	5.7	4.9
80°	202.0	38.4	11.5	4.9	2.5	2.5	3.3	3.3	1.6	0.0	0.0
82.5°	66.3	15.6	4.9	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	25.3	5.7	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.8	0.8	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)