

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: P963544

Luminaire Tested: **NAV-SB3A-740-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963544
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-740-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10657.9 lumens
Efficiency: N/A
Efficacy: 125.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 84.7
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



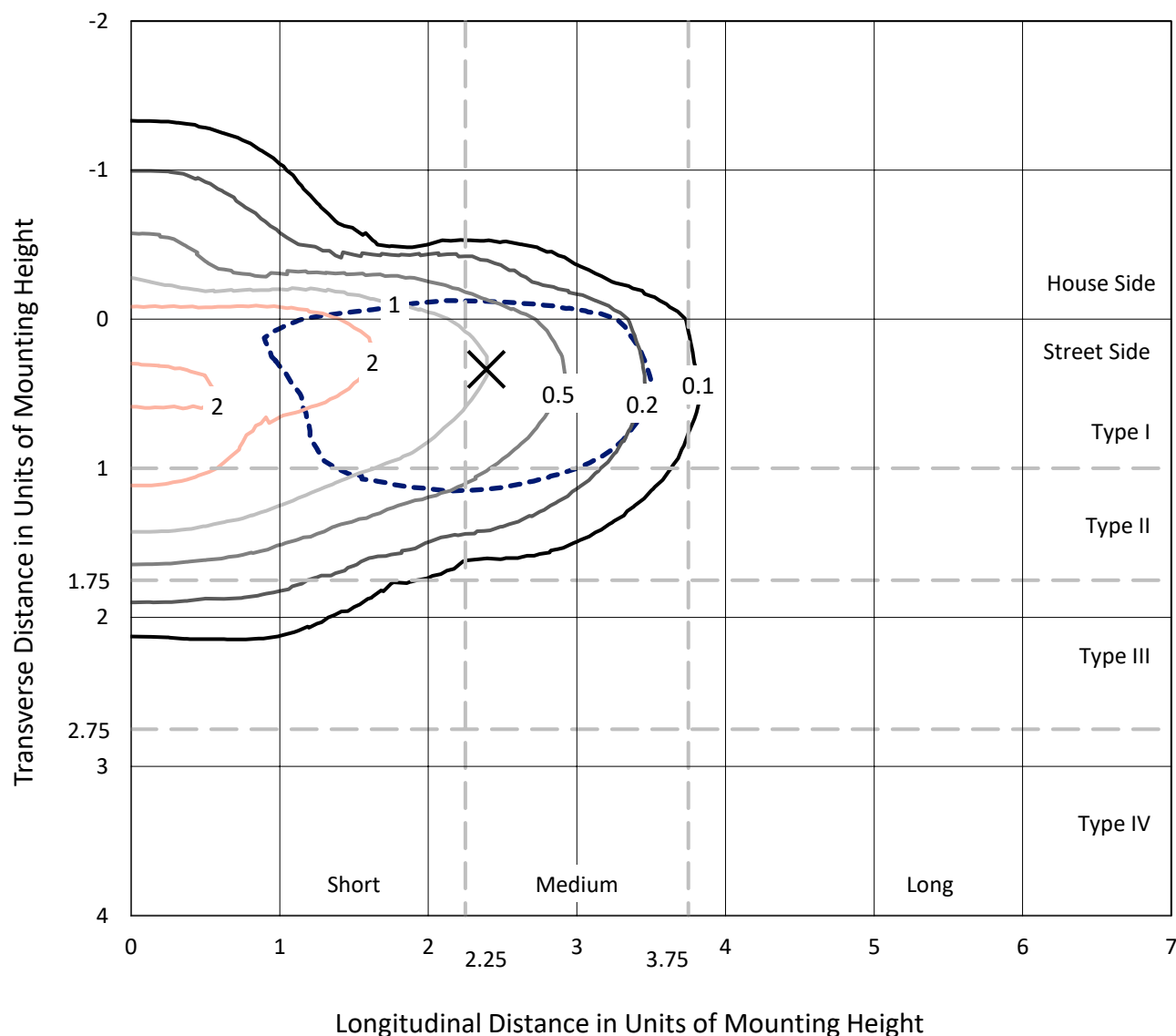
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

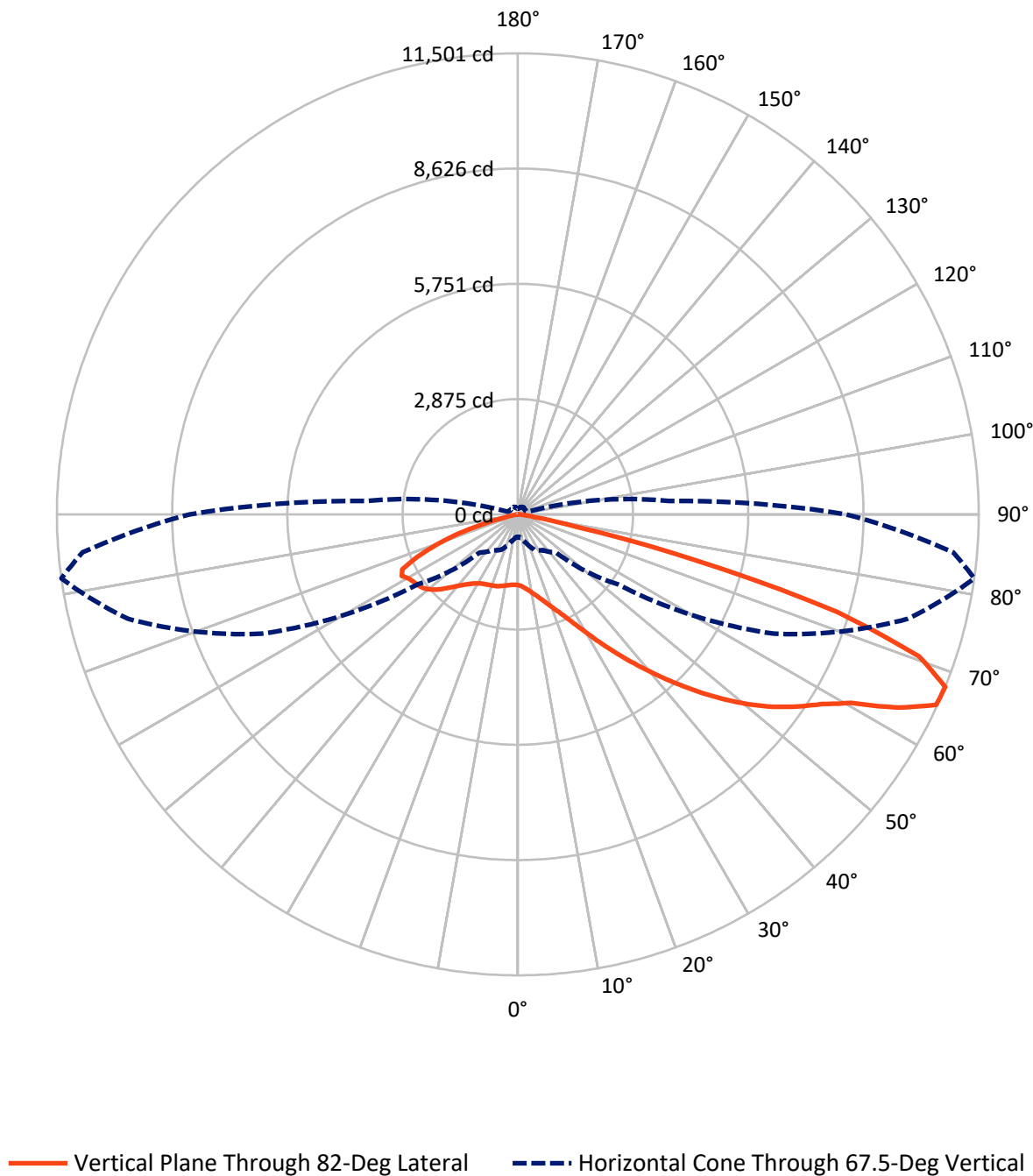


Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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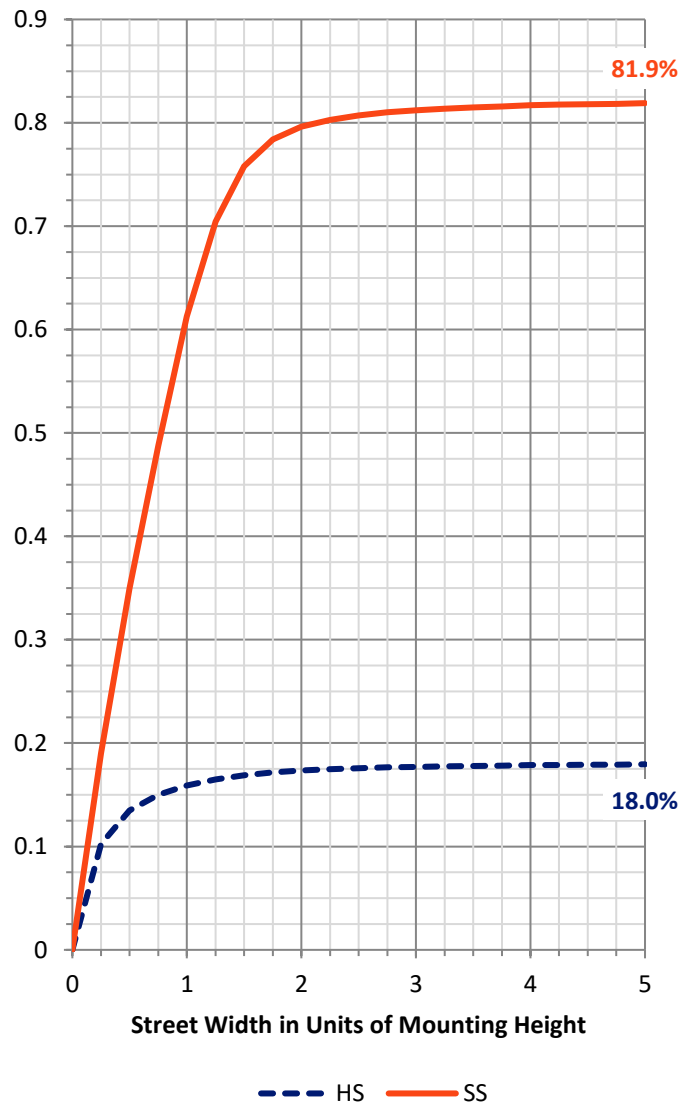
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1930.6	0.0	1930.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	8727.3	0.0	8727.3
	% Fixture	81.9	0.0	81.9
Total	Lumens	10657.9	0.0	10657.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.3	1.5
10°-20°	408.8	3.8
20°-30°	654.7	6.1
30°-40°	1157.8	10.9
40°-50°	2028.5	19.0
50°-60°	2705.5	25.4
60°-70°	2518.7	23.6
70°-80°	966.7	9.1
80°-90°	60.0	0.6
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°	10657.9	100.0
0°-180°	10657.9	100.0

Coefficient of Utilization



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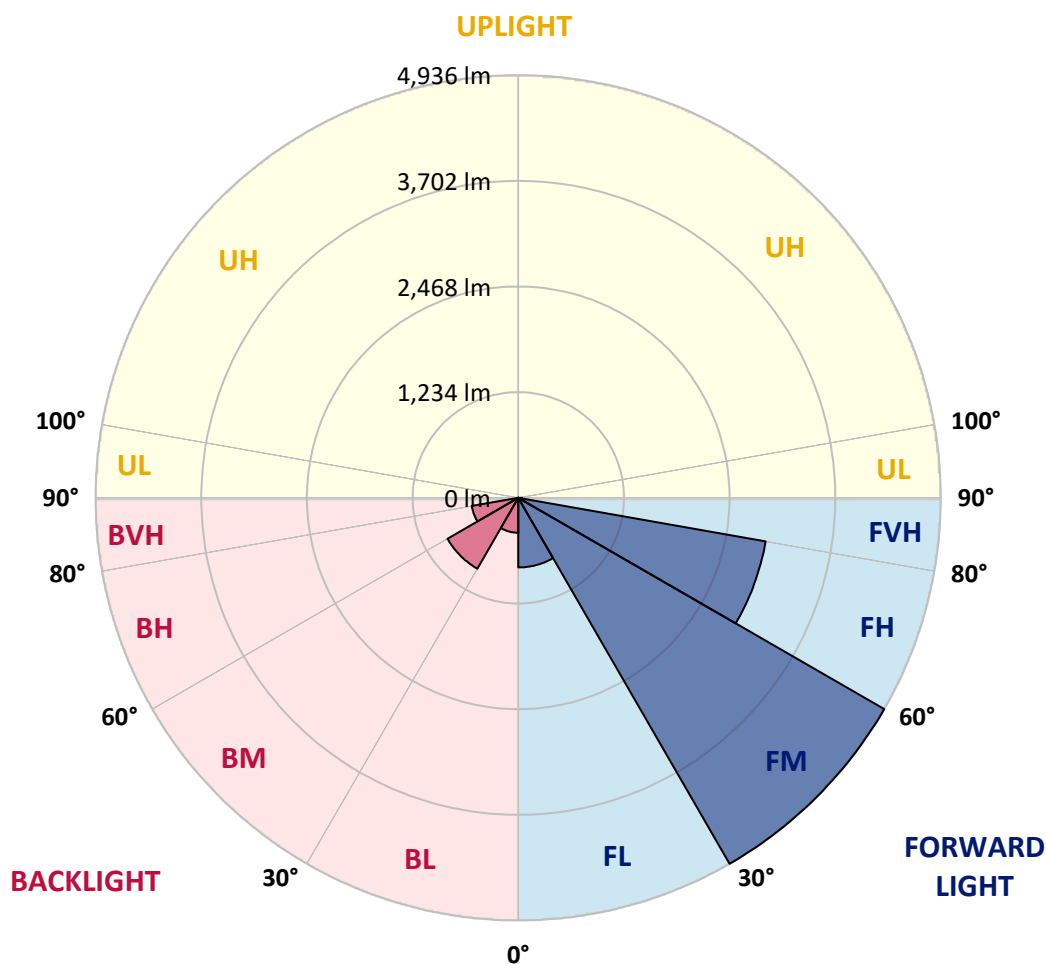
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	813.1	7.6			
FM	(30°-60°)	4936.3	46.3			
FH	(60°-80°)	2934.3	27.5			G2/5000
FVH	(80°-90°)	43.6	0.4			G1/100
BL	(0°-30°)	407.7	3.8	B1/500		
BM	(30°-60°)	955.4	9.0	B1/1000		
BH	(60°-80°)	551.0	5.2	B2/1000		G2/1000
BVH	(80°-90°)	16.4	0.2			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°	82°	85°
0°	1765.7	1765.7	1765.7	1765.7	1765.7	1765.7	1765.7	1765.7	1765.7	1765.7	1765.7
2.5°	1866.2	1876.9	1870.8	1867.8	1862.3	1854.6	1848.5	1829.3	1809.4	1796.3	1791.8
5°	1903.8	1914.5	1913.8	1916.9	1920.6	1923.0	1921.5	1899.9	1871.5	1849.3	1836.3
7.5°	1871.5	1883.8	1893.8	1909.2	1936.0	1964.4	1978.2	1973.6	1944.4	1913.8	1897.7
10°	1780.2	1793.2	1817.1	1853.1	1909.9	1971.3	2022.7	2046.5	2028.1	1994.3	1972.1
12.5°	1612.9	1626.0	1672.8	1751.1	1846.2	1952.9	2051.1	2114.8	2119.4	2085.7	2059.5
15°	1425.0	1438.0	1487.9	1586.1	1731.1	1902.3	2066.5	2186.9	2227.6	2198.4	2167.0
17.5°	1308.3	1319.8	1357.4	1436.4	1587.6	1800.9	2061.1	2263.7	2356.5	2333.5	2295.9
20°	1273.0	1283.0	1300.6	1355.9	1481.7	1695.9	2025.8	2335.8	2495.4	2482.3	2440.1
22.5°	1310.7	1319.8	1325.2	1349.7	1428.7	1626.8	1981.3	2409.5	2656.6	2658.1	2606.7
25°	1397.4	1406.5	1400.4	1415.7	1450.3	1605.3	1964.4	2496.2	2859.1	2876.0	2817.7
27.5°	1540.1	1540.8	1526.2	1525.5	1530.8	1637.5	1982.0	2589.0	3114.7	3146.1	3074.0
30°	1826.2	1814.8	1758.8	1698.1	1670.5	1734.2	2031.1	2698.7	3416.2	3472.2	3381.7
32.5°	2267.5	2250.6	2147.8	2002.7	1857.0	1890.0	2119.4	2823.9	3744.6	3845.9	3735.4
35°	2746.3	2741.8	2634.2	2418.7	2163.9	2111.7	2262.9	2988.1	4103.0	4264.1	4132.9
37.5°	3191.4	3189.1	3127.7	2873.7	2563.7	2420.9	2493.1	3202.9	4486.6	4719.9	4564.9
40°	3598.1	3605.0	3543.6	3316.5	3004.2	2817.7	2806.1	3468.4	4913.3	5216.4	5032.2
42.5°	3949.5	3957.2	3895.0	3727.0	3439.3	3256.6	3190.6	3793.7	5330.0	5749.7	5531.8
45°	4188.2	4235.7	4226.6	4092.2	3885.9	3696.3	3652.6	4202.0	5805.0	6315.2	6059.7
47.5°	4255.7	4299.5	4368.4	4386.9	4261.0	4074.6	4126.8	4693.9	6285.3	6881.5	6590.7
50°	4089.1	4129.8	4273.3	4464.4	4551.9	4494.3	4588.0	5221.0	6777.2	7446.3	7111.8
52.5°	3760.7	3802.2	3983.3	4285.6	4642.4	4823.5	5050.7	5740.5	7253.7	7981.2	7605.2
55°	3285.7	3329.5	3562.0	3904.2	4469.8	4959.4	5436.6	6259.3	7690.4	8462.3	8050.2
57.5°	2639.7	2671.9	2913.6	3392.4	4035.4	4824.3	5721.3	6825.6	8101.6	8934.9	8491.4
60°	1720.4	1748.8	2029.6	2563.7	3315.7	4373.1	5778.1	7457.1	8648.0	9549.6	9086.1
62.5°	1144.1	1163.3	1329.8	1721.9	2335.1	3506.7	5445.8	7961.2	9449.1	10619.3	10106.0
65°	784.9	804.2	970.7	1243.8	1508.6	2319.7	4490.5	7894.4	10175.0	11468.7	10861.8
67.5°	560.2	576.3	717.5	975.3	1091.9	1347.5	3044.0	7041.1	10070.6	11501.0	10902.4
70°	401.3	410.5	527.2	759.6	867.9	809.5	1692.8	5385.2	8817.6	10620.0	10072.2
72.5°	280.8	283.9	366.0	578.6	699.0	590.8	805.8	3590.4	6669.0	8335.7	7808.6
75°	190.3	194.1	246.3	424.4	560.9	451.2	426.6	1925.3	3915.0	4614.0	4136.0
77.5°	116.6	118.2	158.9	290.1	419.7	343.8	274.7	815.7	1514.7	1487.1	1267.6
80°	66.0	66.0	101.3	180.3	286.2	221.8	192.6	346.9	479.6	421.3	371.4
82.5°	36.8	37.6	73.7	112.0	189.5	131.2	105.9	160.4	207.2	183.4	159.6
85°	15.4	16.9	45.3	53.0	90.5	65.2	42.9	67.5	76.8	68.3	49.9
87.5°	1.5	2.3	13.8	9.9	10.8	13.0	6.1	13.0	10.8	10.8	7.7
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°	1765.7	1765.7	1765.7	1765.7	1765.7	1765.7	1765.7	1765.7	1765.7	1765.7	1765.7
2.5°	1777.1	1765.7	1736.5	1702.7	1658.2	1636.7	1607.6	1587.6	1570.7	1572.2	1557.0
5°	1811.7	1782.6	1717.3	1636.0	1534.7	1462.6	1385.8	1332.9	1289.9	1280.7	1259.9
7.5°	1859.2	1813.2	1698.9	1552.4	1381.2	1251.5	1135.7	1061.3	1008.3	991.4	974.6
10°	1920.6	1853.9	1675.2	1447.2	1200.9	1035.9	911.6	853.3	817.2	804.9	795.7
12.5°	1992.0	1900.8	1643.7	1319.1	1015.2	856.4	777.4	748.1	736.7	732.8	730.5
15°	2081.8	1959.1	1596.0	1167.2	857.9	746.6	712.9	709.0	710.5	709.0	708.3
17.5°	2188.5	2022.7	1518.5	1010.5	752.0	690.6	678.3	681.4	685.2	684.5	683.0
20°	2305.1	2085.7	1419.6	871.7	679.9	650.7	643.8	646.9	650.0	648.4	647.6
22.5°	2437.9	2153.2	1309.8	763.5	631.5	613.9	606.2	607.0	607.0	603.9	602.4
25°	2596.7	2227.6	1194.7	686.7	594.7	580.9	571.6	568.6	564.0	554.8	553.3
27.5°	2786.3	2306.7	1084.2	633.0	565.5	552.5	541.7	534.0	522.5	507.2	505.6
30°	2999.6	2402.6	990.7	599.3	542.5	529.5	517.2	505.6	488.8	469.7	468.1
32.5°	3250.5	2505.4	922.4	577.1	521.8	508.0	493.4	479.6	461.1	442.0	442.8
35°	3549.8	2629.7	882.4	561.7	505.6	487.3	471.2	455.8	442.0	425.1	423.5
37.5°	3874.3	2761.7	870.1	554.0	495.0	466.6	448.1	437.4	435.8	425.9	425.1
40°	4229.6	2918.2	879.3	549.4	483.4	446.6	426.6	424.4	428.1	410.5	411.3
42.5°	4605.6	3103.9	894.7	544.1	467.3	426.6	407.4	407.4	404.4	379.9	379.9
45°	5012.2	3318.0	910.1	531.1	448.1	406.7	392.1	386.7	373.7	349.9	349.1
47.5°	5422.0	3535.9	921.6	507.2	425.1	389.8	376.8	364.5	345.3	323.8	323.1
50°	5811.1	3731.6	909.3	471.9	399.0	373.7	359.9	343.0	322.3	307.7	305.4
52.5°	6158.7	3901.2	857.1	430.5	371.4	356.8	344.5	326.9	310.0	294.7	293.2
55°	6461.1	4038.5	765.1	391.3	346.9	342.2	329.9	307.7	284.6	271.6	270.1
57.5°	6751.1	4142.9	650.0	359.2	324.6	326.2	307.7	287.7	266.3	252.5	250.9
60°	7137.1	4282.6	533.3	329.2	300.8	305.4	285.5	270.9	244.1	226.3	224.1
62.5°	7754.0	4499.8	423.5	292.3	273.2	274.7	266.3	248.7	216.4	195.7	194.1
65°	8243.6	4419.9	333.8	252.5	241.7	244.1	244.1	224.8	190.3	166.6	164.2
67.5°	8188.3	3784.5	266.3	213.3	211.8	213.3	218.7	202.5	168.8	149.6	146.6
70°	7543.0	3010.3	213.3	177.2	184.2	180.3	195.7	184.9	151.9	132.7	130.5
72.5°	6154.9	2168.5	162.7	146.6	141.1	147.3	176.5	166.6	126.6	105.2	102.8
75°	3596.5	1157.1	121.3	115.8	102.1	122.8	156.5	142.0	96.7	77.5	75.2
77.5°	1171.0	403.6	89.0	85.2	76.0	99.0	133.6	119.7	79.0	61.4	59.0
80°	313.9	122.0	60.6	56.0	49.1	73.7	105.9	95.1	56.8	39.9	39.2
82.5°	125.9	51.5	35.3	31.5	26.9	50.6	83.6	76.8	42.2	25.3	25.3
85°	40.7	16.9	13.0	9.9	12.3	31.5	49.9	52.2	29.9	13.0	9.9
87.5°	5.3	2.3	2.3	3.1	2.3	5.3	15.4	14.6	8.4	1.5	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)