

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: P963553

Luminaire Tested: **NAV-SB3A-740-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963553
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-740-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14605.2 lumens
Efficiency: N/A
Efficacy: 172.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

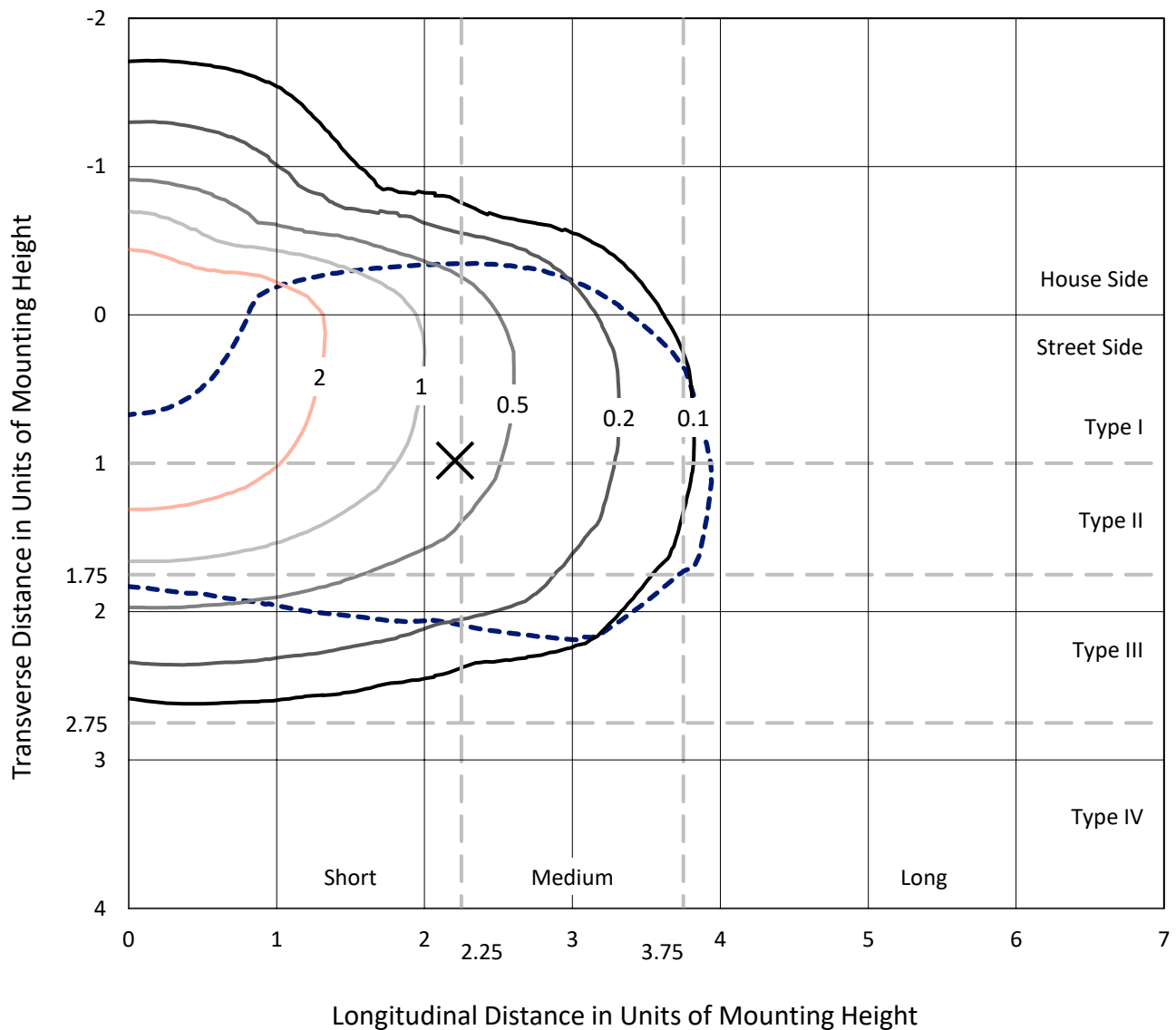
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

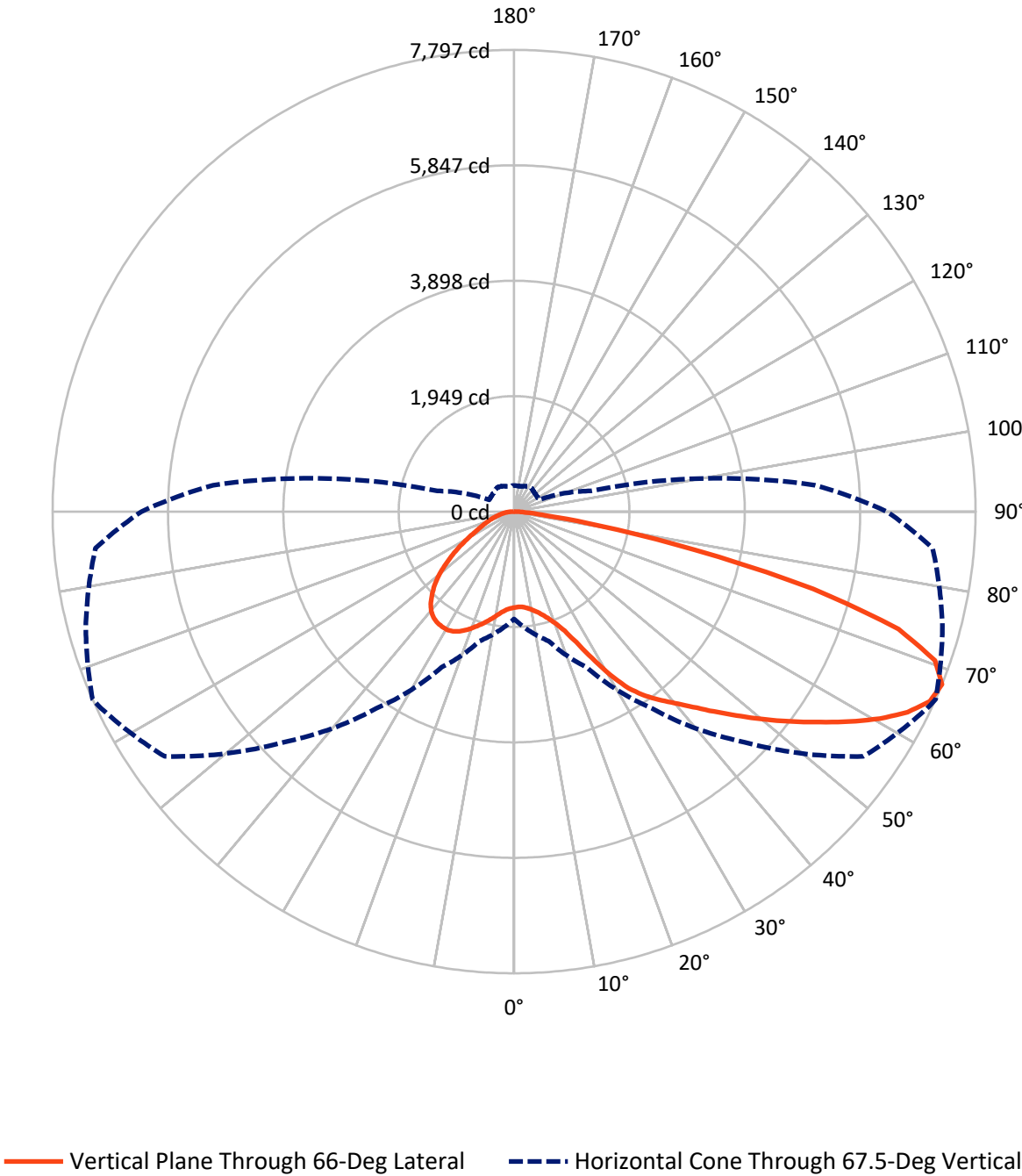
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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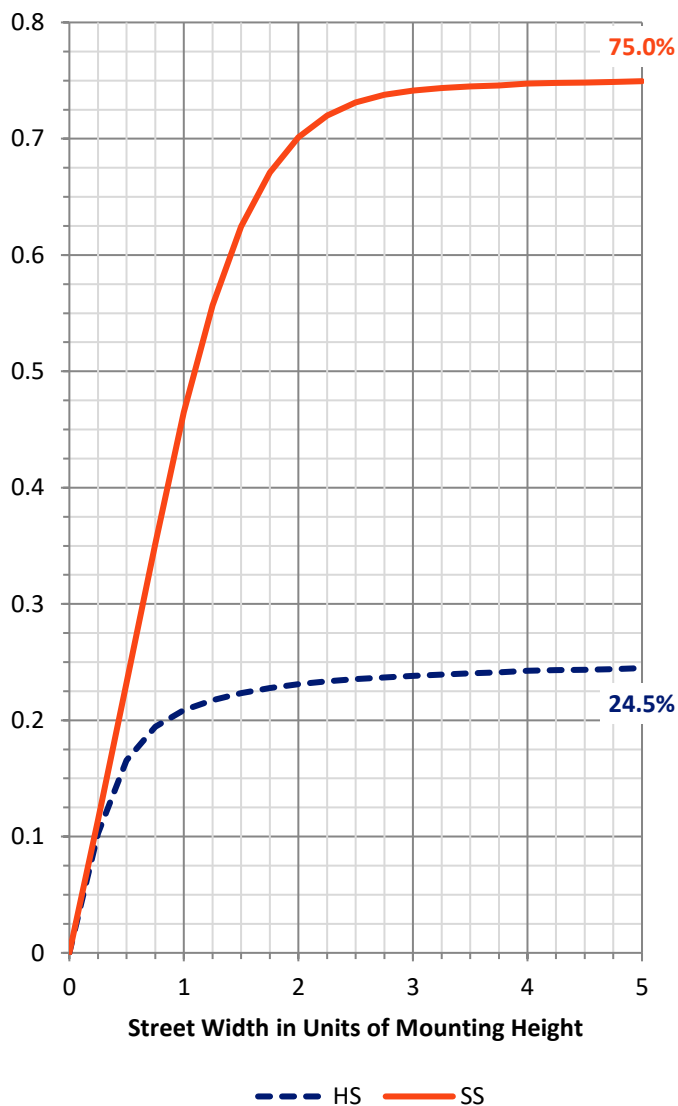
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3631.5	0.0	3631.5
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	10973.7	0.0	10973.7
	% Fixture	75.1	0.0	75.1
Total	Lumens	14605.2	0.0	14605.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.6	1.1
10°-20°	530.6	3.6
20°-30°	1022.8	7.0
30°-40°	1793.3	12.3
40°-50°	2666.0	18.3
50°-60°	3379.4	23.1
60°-70°	3306.7	22.6
70°-80°	1577.3	10.8
80°-90°	168.6	1.2
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°	14605.2	100.0
0°-180°	14605.2	100.0

Coefficient of Utilization



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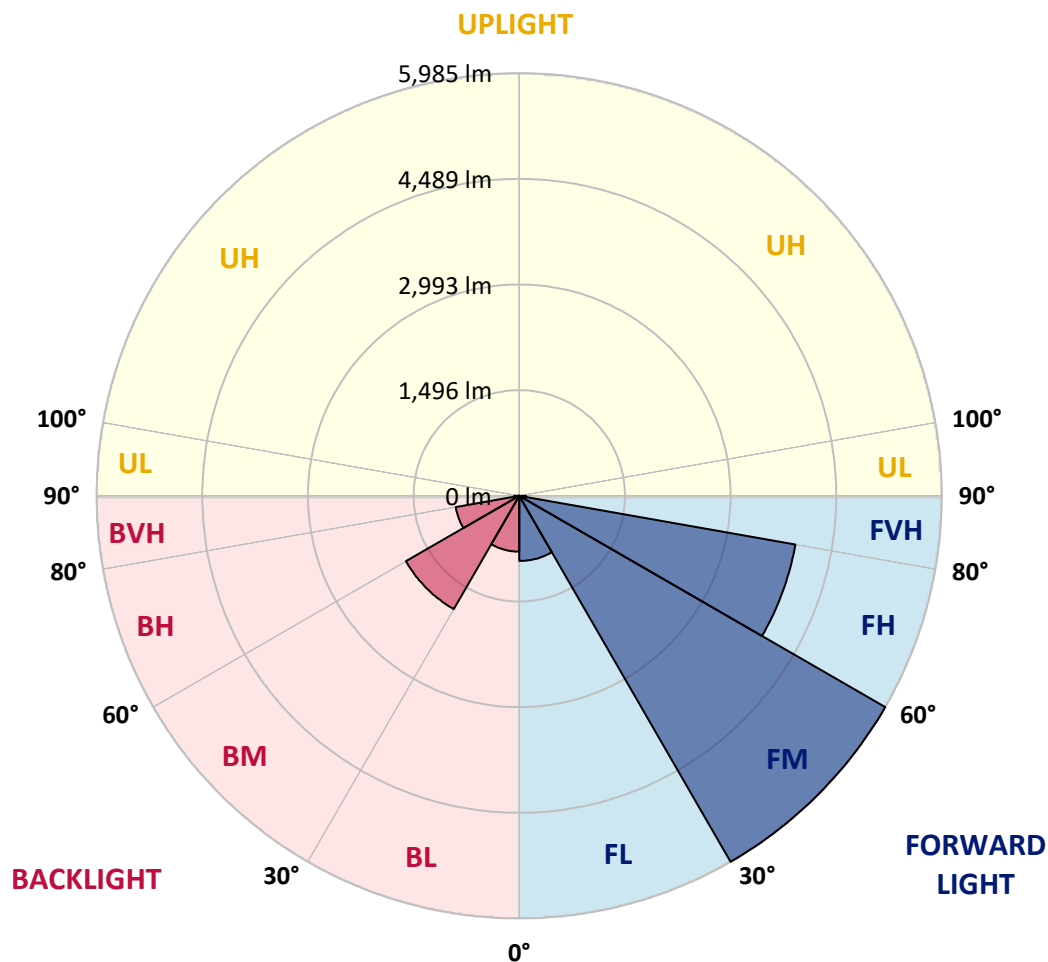
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	922.9	6.3			
FM	(30°-60°)	5985.1	41.0			
FH	(60°-80°)	3970.1	27.2			G2/5000
FVH	(80°-90°)	95.6	0.7			G1/100
BL	(0°-30°)	791.1	5.4	B2/1000		
BM	(30°-60°)	1853.6	12.7	B2/2500		
BH	(60°-80°)	913.9	6.3	B2/1000		G2/1000
BVH	(80°-90°)	73.0	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9
2.5°	1603.0	1612.2	1610.0	1606.1	1605.4	1606.9	1609.1	1611.5	1610.7	1614.6	1620.7
5°	1598.4	1607.6	1606.9	1606.9	1610.0	1616.1	1619.9	1623.7	1619.9	1624.5	1632.9
7.5°	1601.5	1608.4	1611.5	1614.6	1622.2	1633.7	1643.0	1651.4	1646.8	1652.1	1662.9
10°	1640.6	1646.0	1649.1	1649.1	1654.5	1667.5	1676.7	1692.1	1688.2	1696.7	1710.4
12.5°	1712.0	1717.4	1717.4	1714.3	1718.1	1726.6	1729.7	1746.5	1739.6	1753.5	1767.2
15°	1799.5	1810.3	1801.7	1796.4	1798.0	1806.4	1805.6	1818.7	1811.8	1823.3	1835.6
17.5°	1896.1	1910.0	1896.1	1895.4	1892.4	1901.6	1902.3	1913.8	1901.6	1910.0	1918.4
20°	2010.5	2029.7	2018.2	2022.0	2015.2	2018.9	2022.7	2039.6	2020.5	2026.6	2024.3
22.5°	2171.7	2194.6	2182.4	2197.0	2192.4	2189.3	2188.6	2218.5	2188.6	2190.8	2168.6
25°	2406.5	2434.1	2412.6	2432.5	2432.5	2442.6	2454.1	2492.4	2442.6	2427.9	2370.4
27.5°	2753.4	2780.9	2738.7	2751.0	2747.2	2771.7	2759.4	2854.6	2800.9	2777.1	2661.2
30°	3170.7	3219.8	3140.1	3137.0	3133.1	3172.3	3189.9	3252.8	3198.4	3174.6	3034.9
32.5°	3621.9	3673.4	3578.3	3550.6	3536.0	3559.8	3545.3	3595.9	3558.3	3521.5	3348.8
35°	4099.3	4149.9	4059.4	4005.7	3947.4	3897.5	3845.3	3858.3	3823.0	3767.0	3588.2
37.5°	4550.5	4643.4	4547.4	4489.9	4382.4	4285.0	4139.2	4078.6	4045.6	3994.1	3813.8
40°	5010.1	5063.1	4990.2	4941.1	4824.5	4671.7	4438.5	4310.3	4265.8	4215.9	4063.2
42.5°	5348.6	5399.2	5360.0	5326.3	5235.0	5057.8	4756.1	4595.8	4531.3	4475.3	4345.6
45°	5617.1	5654.7	5630.2	5642.4	5603.4	5431.5	5085.3	4902.0	4835.2	4766.9	4664.8
47.5°	5725.3	5765.2	5804.4	5877.2	5944.1	5817.4	5439.1	5233.4	5162.8	5093.0	4992.5
50°	5713.0	5753.7	5867.3	6022.3	6229.4	6187.3	5812.1	5586.5	5521.2	5441.4	5348.6
52.5°	5614.8	5660.9	5806.6	6064.5	6394.5	6464.3	6191.9	5950.9	5889.5	5794.4	5701.6
55°	5357.0	5384.6	5603.4	5968.6	6433.6	6657.7	6564.1	6339.2	6277.8	6145.1	6043.8
57.5°	4878.9	4918.9	5237.2	5710.0	6335.4	6788.9	6891.0	6747.5	6688.3	6497.3	6391.4
60°	4255.1	4318.7	4683.2	5275.7	6085.2	6788.2	7187.9	7148.8	7099.7	6844.1	6733.6
62.5°	3549.1	3622.8	3973.4	4661.8	5647.9	6595.6	7373.6	7484.9	7459.5	7164.1	7023.0
65°	2725.7	2776.3	3125.5	3867.5	4967.2	6181.9	7395.2	7714.4	7719.0	7407.4	7174.1
67.5°	1814.9	1960.6	2263.7	2902.2	4055.5	5505.9	7206.4	7752.0	7796.5	7491.0	7098.1
70°	885.5	1077.4	1374.3	1886.2	2902.2	4469.1	6712.9	7443.4	7542.5	7247.1	6645.4
72.5°	367.6	429.7	591.6	930.8	1665.9	3015.8	5721.4	6607.0	6790.4	6421.3	5587.2
75°	247.8	268.5	338.5	477.3	758.9	1487.2	4126.1	4926.5	5222.0	4849.8	3964.2
77.5°	191.1	204.1	246.3	333.8	451.2	562.5	2208.5	2968.9	3121.6	2889.9	2062.7
80°	150.4	160.4	184.2	243.2	320.0	300.8	752.8	1345.2	1433.5	1202.4	663.0
82.5°	130.5	134.3	132.0	165.0	212.6	175.7	247.1	496.5	547.9	397.5	216.4
85°	94.4	105.2	109.8	102.1	112.9	89.0	101.3	175.7	193.4	172.6	122.0
87.5°	38.3	56.8	69.8	66.0	41.4	25.3	31.5	51.5	59.0	64.5	39.9
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°	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9
2.5°	1621.4	1626.8	1630.7	1635.3	1638.4	1643.0	1652.1	1657.5	1658.2	1662.1	1661.3
5°	1636.0	1643.7	1652.1	1664.4	1678.2	1689.7	1707.3	1719.6	1724.3	1728.2	1727.3
7.5°	1667.5	1678.2	1693.6	1715.0	1735.0	1750.4	1771.8	1786.5	1801.0	1806.4	1807.2
10°	1714.3	1729.7	1751.9	1781.0	1802.6	1822.4	1844.8	1857.0	1871.6	1877.7	1880.8
12.5°	1772.6	1788.7	1817.9	1858.5	1878.5	1892.4	1900.0	1897.0	1900.0	1905.4	1906.9
15°	1839.4	1857.0	1890.0	1933.8	1947.6	1935.3	1918.4	1903.1	1900.8	1902.3	1907.6
17.5°	1918.4	1931.5	1969.8	2006.6	1996.7	1946.1	1909.2	1884.7	1872.4	1868.6	1873.9
20°	2028.9	2028.9	2060.4	2083.4	2016.7	1930.7	1873.2	1833.2	1807.9	1797.1	1794.9
22.5°	2163.2	2151.0	2170.8	2154.8	2012.8	1887.7	1807.9	1738.8	1700.5	1685.1	1682.8
25°	2333.5	2319.0	2313.6	2213.9	1985.2	1819.5	1689.7	1606.1	1572.4	1563.9	1565.4
27.5°	2590.6	2553.8	2484.0	2246.1	1934.5	1712.0	1551.6	1474.2	1454.9	1455.7	1458.0
30°	2932.8	2859.2	2688.1	2251.4	1851.7	1560.0	1410.4	1355.2	1345.9	1349.8	1362.8
32.5°	3249.8	3180.0	2896.9	2226.9	1724.3	1411.2	1283.8	1247.0	1233.2	1237.8	1243.9
35°	3498.4	3479.3	3090.2	2192.4	1567.7	1271.5	1170.2	1138.8	1111.9	1105.8	1110.4
37.5°	3733.3	3725.6	3235.2	2144.0	1412.8	1172.5	1078.9	1037.5	998.4	976.8	977.6
40°	3991.0	3983.4	3330.3	2069.6	1275.4	1086.6	996.8	942.3	894.0	854.8	858.6
42.5°	4281.1	4235.9	3375.6	1962.9	1158.8	1013.7	930.1	856.4	792.7	756.7	758.9
45°	4598.0	4496.0	3374.9	1827.1	1060.5	946.9	858.6	754.3	695.3	661.4	659.9
47.5°	4934.1	4744.6	3333.4	1676.7	965.3	873.3	748.1	668.4	629.2	608.5	603.9
50°	5281.0	4977.2	3262.9	1504.1	867.9	789.7	679.2	624.6	594.7	575.5	568.7
52.5°	5607.2	5188.1	3177.7	1308.4	768.9	708.3	648.4	606.2	574.7	553.3	544.1
55°	5910.3	5370.1	3057.2	1108.1	688.3	653.8	633.9	598.5	562.5	537.2	527.2
57.5°	6179.6	5488.3	2849.2	920.0	630.8	616.2	618.5	585.5	544.1	522.5	508.8
60°	6403.7	5575.0	2541.5	745.9	583.9	579.3	594.7	561.0	512.6	488.0	477.3
62.5°	6538.0	5573.4	2164.0	610.8	544.1	545.6	563.2	530.2	481.1	458.1	451.2
65°	6526.5	5436.8	1749.6	522.5	505.7	507.3	530.2	496.5	455.1	441.3	440.4
67.5°	6295.4	5103.8	1342.1	465.0	463.5	470.4	497.2	473.4	438.9	437.4	439.7
70°	5670.1	4412.3	966.9	419.0	419.7	429.7	465.0	458.9	430.5	433.6	432.8
72.5°	4546.7	3364.2	649.2	370.6	371.4	387.6	434.3	447.4	422.1	462.7	468.8
75°	3028.1	2098.0	417.5	319.2	320.0	340.7	407.4	425.2	399.0	461.1	465.0
77.5°	1454.9	943.1	302.4	268.5	268.5	287.7	352.2	380.6	340.0	358.3	328.4
80°	502.7	354.5	237.9	216.4	211.8	224.9	296.9	329.9	293.2	270.1	253.3
82.5°	198.0	184.2	191.1	168.1	152.7	161.1	230.9	272.4	215.7	195.0	194.1
85°	113.6	119.7	135.1	111.3	88.3	99.0	169.6	195.7	162.7	143.5	146.6
87.5°	30.6	42.2	62.1	57.5	39.9	42.2	80.6	108.2	93.6	72.2	74.4
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)