

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: P883090

Luminaire Tested: **NAV-SB3B-735-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883090
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-735-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12788 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

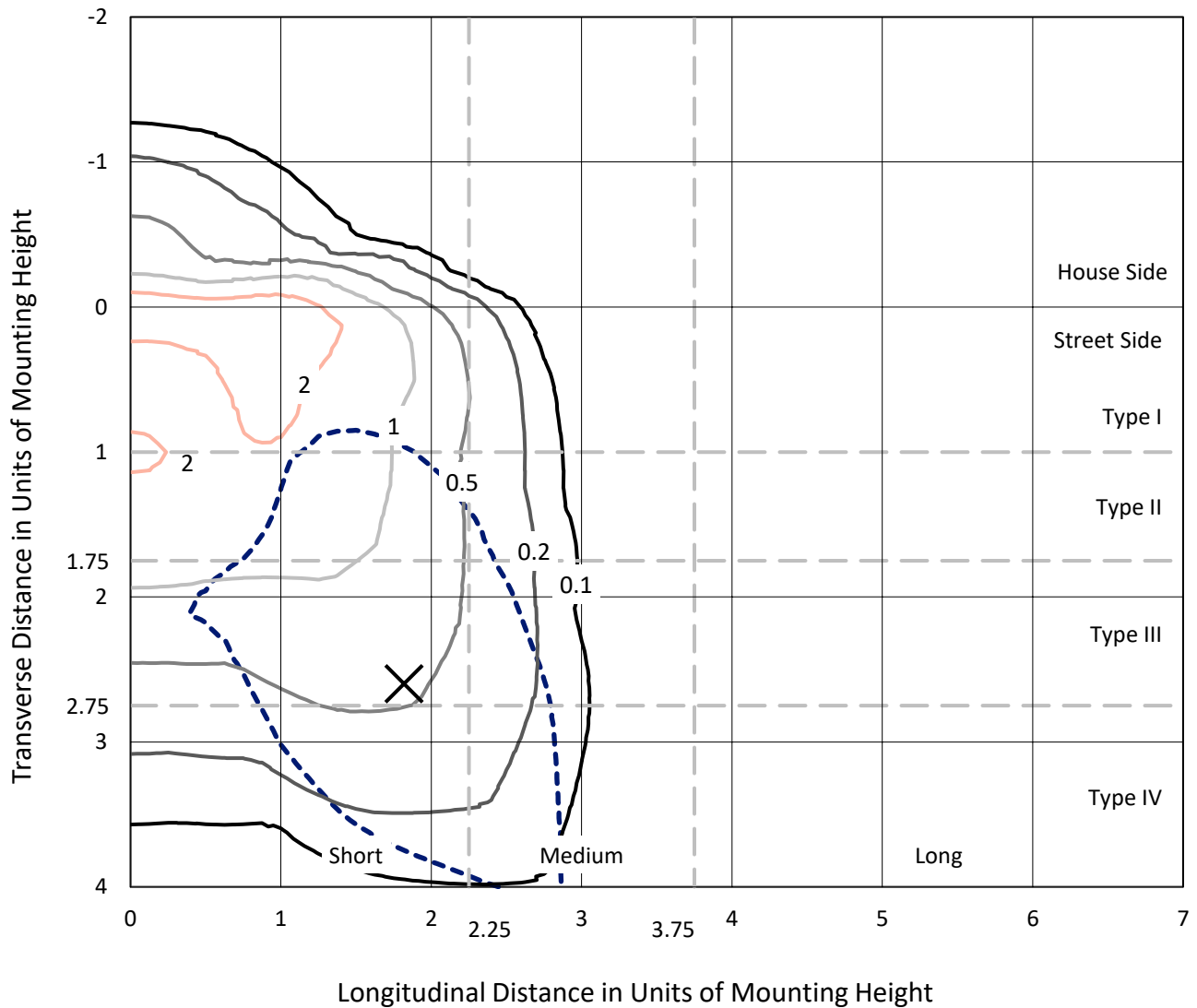
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

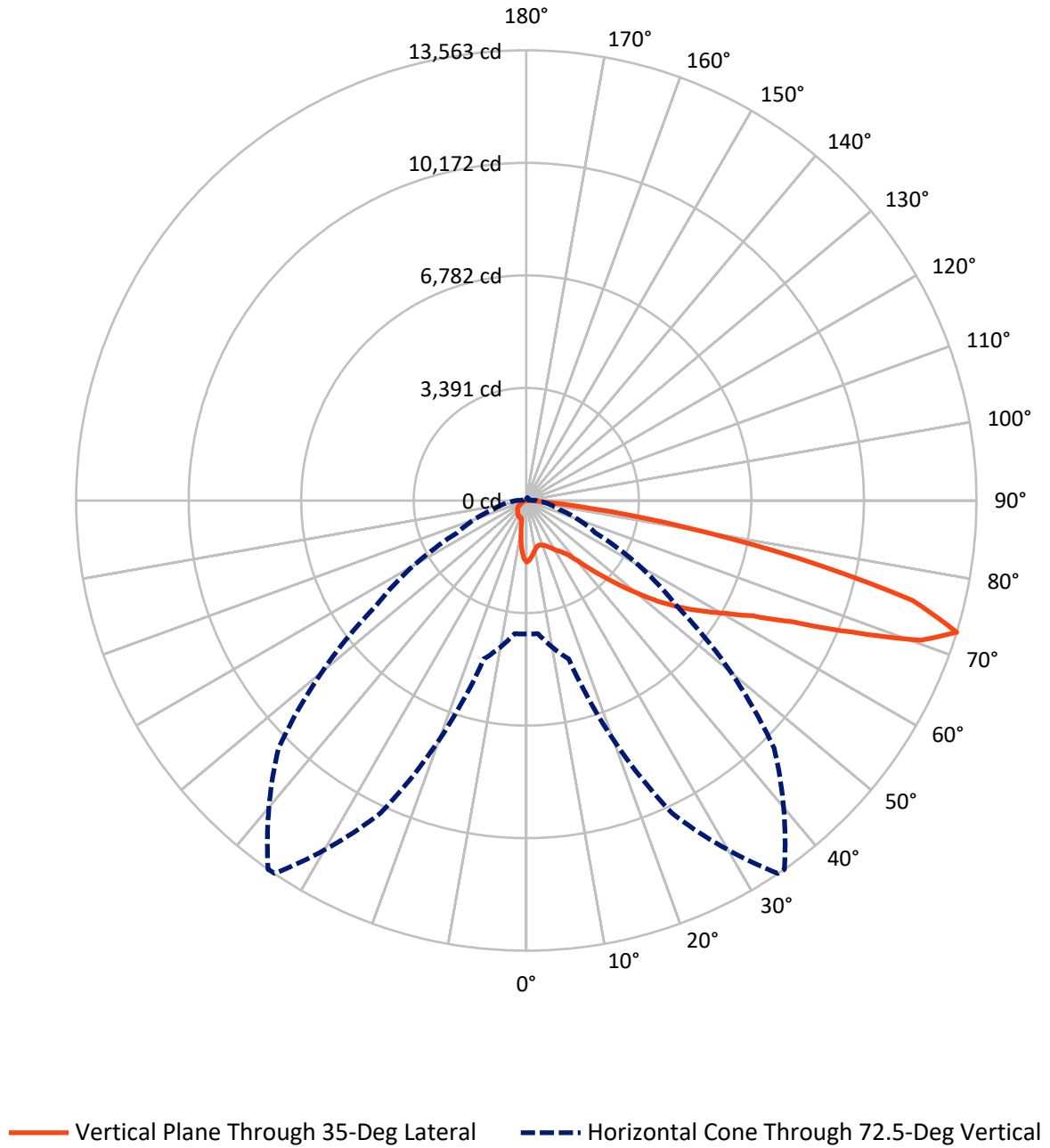
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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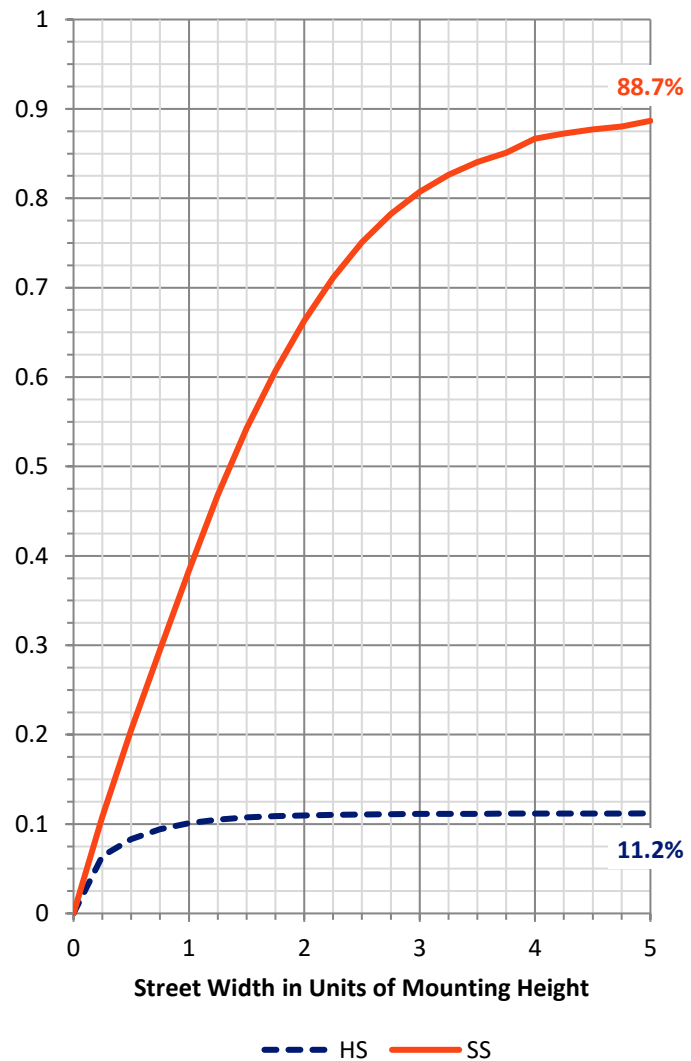
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1439.2	0.0	1439.2
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	11348.8	0.0	11348.8
	% Fixture	88.7	0.0	88.7
Total	Lumens	12788.0	0.0	12788.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.3	1.2
10°-20°	356.3	2.8
20°-30°	578.8	4.5
30°-40°	965.7	7.6
40°-50°	1827.1	14.3
50°-60°	2903.3	22.7
60°-70°	3591.6	28.1
70°-80°	2232.5	17.5
80°-90°	180.4	1.4
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°	12788.0	100.0
0°-180°	12788.0	100.0

Coefficient of Utilization



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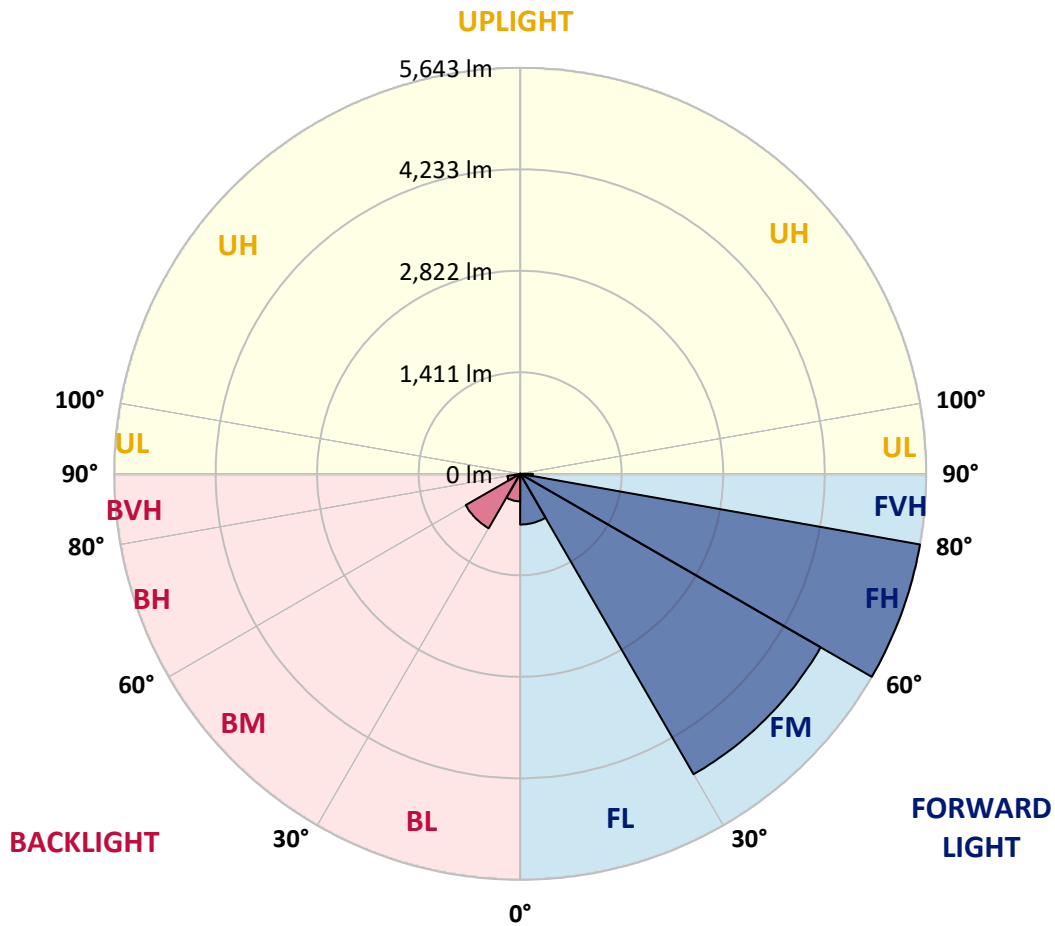
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	704.9	5.5			
FM (30°-60°)	4822.4	37.7			
FH (60°-80°)	5643.5	44.1			G3/7500
FVH (80°-90°)	178.0	1.4			G2/225
BL (0°-30°)	382.4	3.0	B1/500		
BM (30°-60°)	873.7	6.8	B1/1000		
BH (60°-80°)	180.6	1.4	B1/500		G1/500
BVH (80°-90°)	2.5	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-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1853.4	1853.4	1853.4	1853.4	1853.4	1853.4	1853.4	1853.4	1853.4	1853.4	1853.4
2.5°	1771.0	1785.9	1788.8	1793.4	1793.4	1799.1	1808.4	1821.6	1843.1	1854.3	1861.8
5°	1632.3	1643.5	1657.6	1668.8	1690.4	1693.2	1729.7	1765.3	1815.0	1852.5	1878.7
7.5°	1492.7	1505.8	1524.5	1551.7	1579.8	1588.2	1643.5	1703.5	1782.2	1852.5	1896.5
10°	1394.3	1395.2	1412.1	1439.3	1484.2	1494.5	1562.0	1647.3	1745.7	1841.2	1913.4
12.5°	1339.0	1345.5	1353.0	1373.7	1416.8	1423.3	1495.5	1595.7	1709.1	1834.7	1933.1
15°	1339.0	1343.7	1348.4	1358.7	1393.3	1399.0	1462.7	1562.9	1690.4	1837.5	1964.9
17.5°	1353.0	1360.5	1356.8	1369.0	1405.5	1409.3	1465.5	1553.6	1689.4	1855.3	2013.6
20°	1386.8	1392.4	1384.9	1392.4	1428.9	1436.4	1494.5	1571.4	1705.4	1886.2	2074.5
22.5°	1440.2	1443.0	1425.2	1430.8	1468.3	1477.7	1545.1	1622.0	1743.8	1935.9	2156.1
25°	1507.7	1513.3	1486.1	1492.7	1528.3	1539.5	1617.3	1697.9	1804.7	2004.3	2260.1
27.5°	1585.4	1588.2	1564.8	1563.9	1609.8	1625.7	1704.4	1791.6	1886.2	2090.5	2391.3
30°	1674.4	1682.9	1660.4	1656.6	1714.7	1727.9	1805.6	1906.8	2006.1	2219.8	2577.7
32.5°	1744.7	1751.3	1738.2	1747.5	1806.6	1816.9	1928.4	2069.9	2194.5	2403.4	2831.7
35°	1845.9	1849.7	1819.7	1836.5	1904.0	1930.2	2096.1	2298.5	2431.5	2633.9	3163.4
37.5°	2212.3	2212.3	2084.9	2001.5	2066.1	2089.5	2325.7	2586.2	2723.9	2943.2	3581.3
40°	2719.2	2710.8	2524.3	2353.8	2345.3	2391.3	2652.7	2948.8	3101.5	3314.2	4051.6
42.5°	3259.9	3246.7	2992.8	2824.2	2796.0	2812.0	3030.3	3395.7	3551.3	3766.8	4557.6
45°	3739.6	3735.9	3503.5	3276.7	3226.1	3276.7	3501.6	3918.6	4030.1	4256.8	5062.7
47.5°	4141.6	4141.6	3972.0	3823.9	3797.7	3827.7	4139.7	4498.6	4488.3	4778.8	5554.6
50°	4604.5	4600.7	4439.6	4375.8	4403.0	4445.2	4874.3	5109.5	4962.4	5291.3	5994.1
52.5°	4928.7	4951.2	4895.9	4885.6	5024.3	5097.3	5620.2	5707.3	5386.9	5777.6	6323.0
55°	5185.4	5211.7	5275.4	5347.5	5614.6	5710.2	6342.6	6274.2	5742.0	6199.3	6512.2
57.5°	5549.0	5511.5	5609.9	5752.3	6184.3	6299.5	7042.6	6809.3	6027.8	6541.3	6532.8
60°	5990.3	5995.9	6012.8	6192.7	6753.0	6901.1	7732.2	7315.3	6211.5	6751.2	6304.2
62.5°	6520.7	6529.1	6563.8	6840.2	7516.7	7656.3	8466.8	7729.4	6295.8	6692.1	5713.9
65°	6484.1	6519.7	6906.7	7852.2	8677.7	8815.4	9324.2	8019.9	6168.4	6152.4	4652.3
67.5°	5906.9	5965.0	6612.5	9060.9	10428.0	10581.7	10360.5	8077.0	5618.3	4784.4	3035.0
70°	5149.8	5170.4	5949.1	10147.8	12454.8	12610.3	11288.2	7448.3	4263.4	2668.6	1359.6
72.5°	4021.7	4026.3	4939.9	10399.9	13554.8	13563.3	10560.1	5529.3	2292.9	1025.1	472.3
75°	2872.9	2844.8	3308.6	8434.0	11925.4	12020.9	7916.8	2593.6	876.1	484.4	235.2
77.5°	1540.4	1571.4	1872.2	5001.8	8238.2	8401.3	4319.6	747.7	446.0	329.8	155.5
80°	476.0	502.2	767.4	2290.1	4666.3	4764.7	1601.4	332.6	311.1	235.2	102.1
82.5°	149.9	155.5	357.9	962.3	1936.8	1981.8	463.8	188.3	212.7	155.5	60.0
85°	43.1	44.0	159.3	358.9	478.8	488.2	130.2	73.1	121.8	96.5	30.9
87.5°	4.7	15.0	60.0	60.0	42.2	41.2	14.1	15.9	34.7	12.2	5.6
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°	1853.4	1853.4	1853.4	1853.4	1853.4	1853.4	1853.4	1853.4	1853.4	1853.4	1853.4
2.5°	1857.2	1858.1	1845.9	1825.3	1802.8	1784.1	1760.6	1741.9	1728.8	1725.0	1731.6
5°	1870.3	1863.7	1829.0	1766.3	1691.3	1626.7	1554.5	1497.3	1459.9	1443.9	1449.6
7.5°	1890.0	1871.2	1795.3	1671.6	1528.3	1400.8	1271.5	1171.3	1107.5	1075.7	1080.4
10°	1906.8	1869.3	1739.1	1534.8	1315.6	1122.5	948.3	827.4	759.9	728.1	729.0
12.5°	1922.7	1868.4	1666.0	1372.7	1075.7	839.6	677.5	617.5	598.8	592.2	590.3
15°	1952.7	1871.2	1574.2	1187.2	836.8	634.4	575.3	574.4	578.1	576.3	575.3
17.5°	1994.0	1874.0	1470.2	990.4	645.6	559.4	556.6	565.0	570.6	567.8	566.9
20°	2047.4	1885.3	1359.6	795.5	554.7	540.7	547.2	554.7	559.4	554.7	553.8
22.5°	2122.3	1904.9	1238.7	639.0	525.7	529.4	535.0	543.5	548.2	541.6	540.7
25°	2214.2	1935.9	1119.7	555.6	511.6	516.3	524.7	534.1	539.7	533.2	532.2
27.5°	2333.2	1985.5	1010.1	536.9	497.6	500.4	512.5	526.6	534.1	525.7	525.7
30°	2505.6	2067.0	915.5	545.3	489.1	482.6	499.4	519.1	527.5	520.0	519.1
32.5°	2734.2	2182.3	857.4	558.5	485.4	461.9	477.9	503.2	517.2	512.5	512.5
35°	3034.0	2357.5	834.9	573.5	482.6	440.4	451.6	478.8	503.2	507.9	507.9
37.5°	3397.6	2601.1	841.4	580.0	474.1	422.6	428.2	451.6	483.5	498.5	502.2
40°	3810.8	2885.1	878.9	573.5	464.8	407.6	408.5	426.3	454.5	476.9	484.4
42.5°	4237.2	3216.8	948.3	549.1	456.3	394.5	391.7	403.9	422.6	438.5	445.1
45°	4642.9	3557.8	1016.7	515.4	446.0	381.4	374.8	379.5	383.2	389.8	393.5
47.5°	4997.1	3797.7	997.0	484.4	432.0	366.4	355.1	353.3	342.0	341.1	340.1
50°	5241.6	3850.2	885.5	453.5	411.3	349.5	331.7	320.5	300.8	291.4	292.3
52.5°	5319.4	3643.1	723.4	422.6	377.6	327.0	301.7	283.9	259.6	251.1	250.2
55°	5216.3	3237.4	578.1	385.1	330.8	297.0	268.9	245.5	225.8	215.5	215.5
57.5°	4964.3	2721.1	457.3	341.1	281.1	263.3	235.2	211.8	194.9	184.6	182.7
60°	4546.4	2160.7	361.7	288.6	239.9	226.8	197.7	182.7	167.7	155.5	152.7
62.5°	3912.0	1542.3	283.9	228.6	200.5	185.5	168.7	157.4	139.6	122.7	119.9
65°	3052.8	943.6	219.3	167.7	161.2	153.7	143.4	133.1	111.5	94.6	91.8
67.5°	1925.6	447.0	156.5	126.5	127.4	123.7	119.0	110.6	94.6	79.6	77.8
70°	848.0	216.4	103.1	96.5	94.6	94.6	98.4	95.6	80.6	66.5	63.7
72.5°	288.6	116.2	76.8	73.1	68.4	67.5	82.5	79.6	64.7	51.5	48.7
75°	150.9	77.8	56.2	52.5	41.2	49.7	65.6	61.8	45.9	33.7	30.9
77.5°	98.4	55.3	38.4	33.7	23.4	32.8	48.7	43.1	27.2	16.9	15.0
80°	61.8	36.5	22.5	15.9	11.2	17.8	26.2	18.7	10.3	3.7	2.8
82.5°	32.8	18.7	8.4	5.6	4.7	5.6	6.6	4.7	1.9	0.0	0.0
85°	13.1	6.6	2.8	1.9	0.9	0.0	1.9	0.9	0.0	0.0	0.0
87.5°	4.7	0.9	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)