

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: P964198

Luminaire Tested: **NAV-SB3B-830-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964198
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-830-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

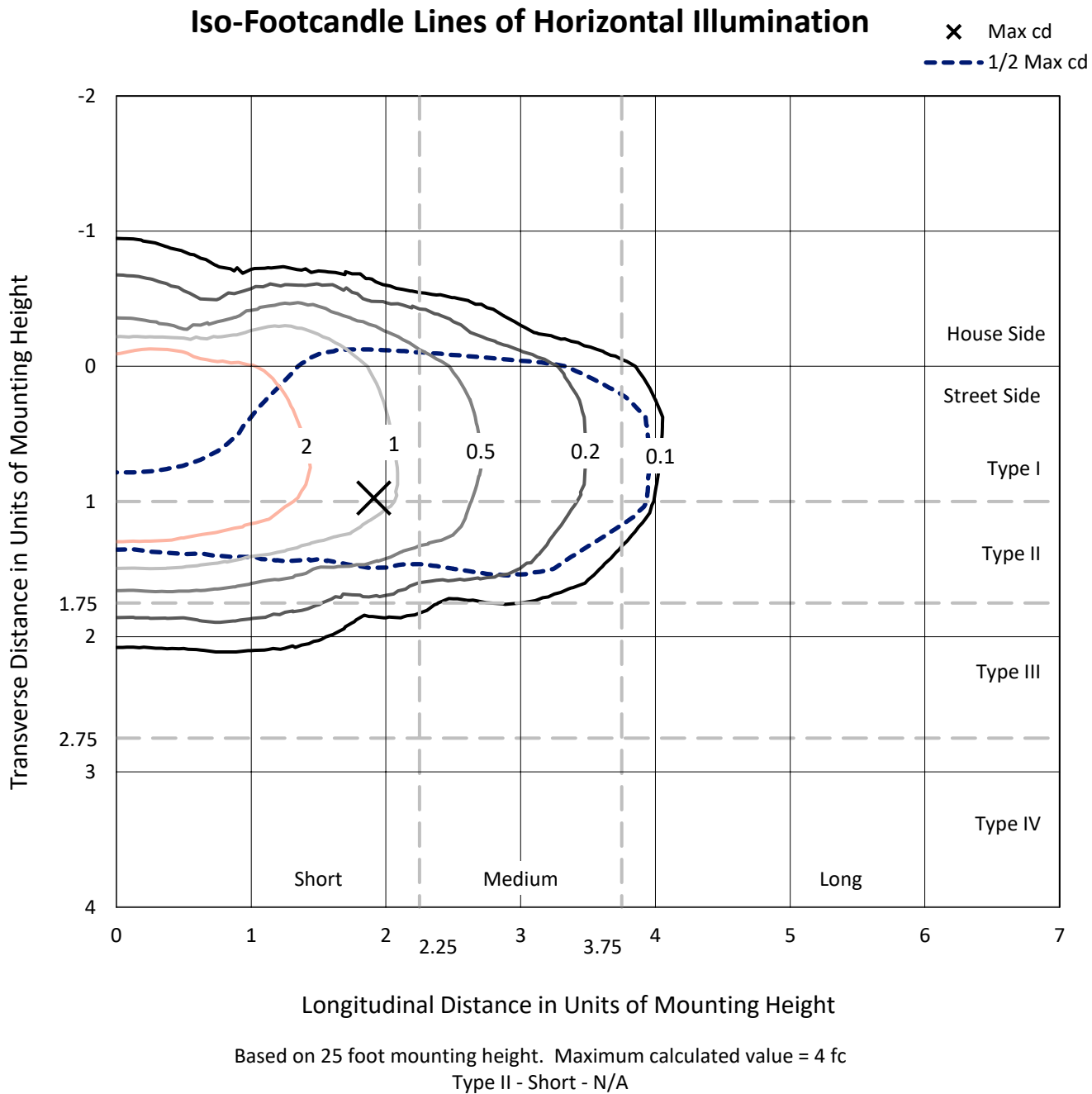
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11892.1 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
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

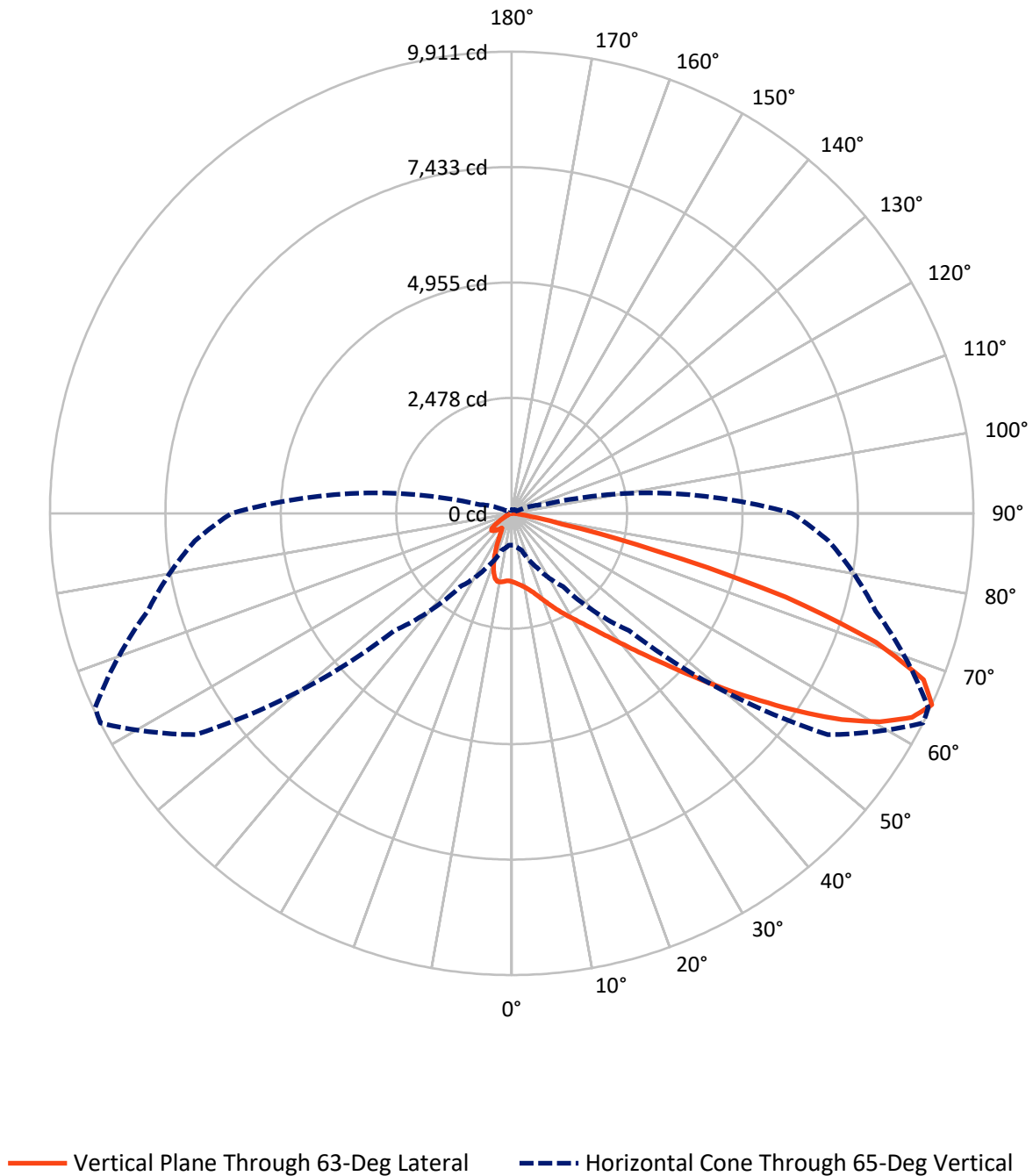


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Luminous Intensity Polar Plot



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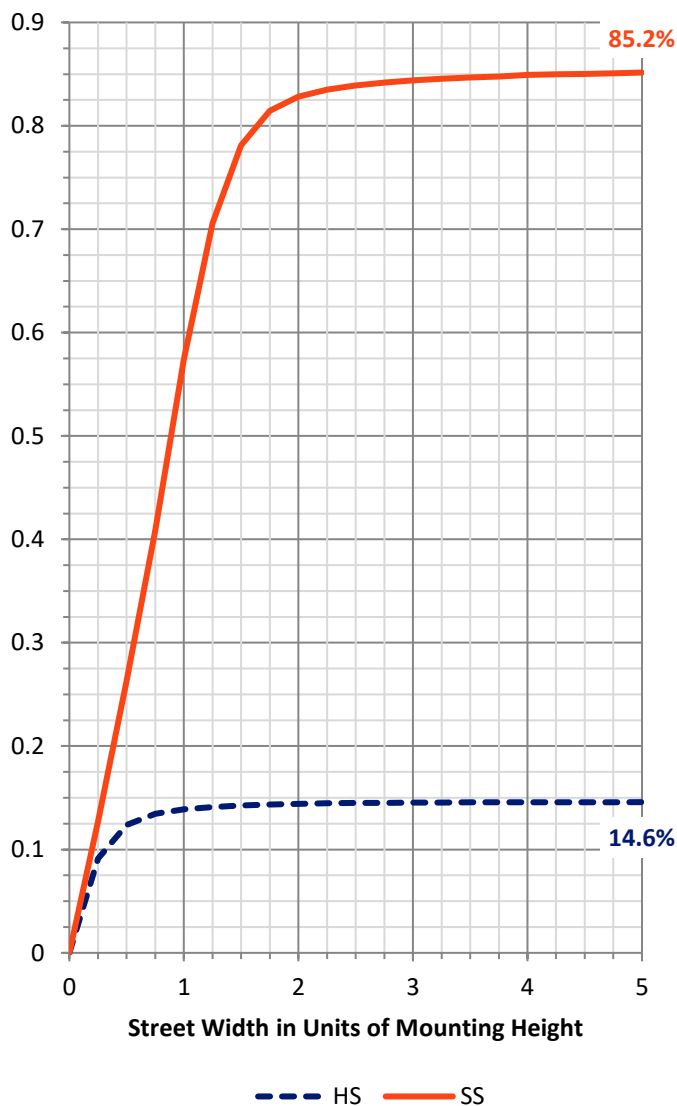
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1748.0	0.0	1748.0
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	10144.0	0.0	10144.0
	% Fixture	85.3	0.0	85.3
Total	Lumens	11892.1	0.0	11892.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.3	1.2
10°-20°	383.7	3.2
20°-30°	668.1	5.6
30°-40°	1204.2	10.1
40°-50°	2388.3	20.1
50°-60°	3253.2	27.4
60°-70°	2596.7	21.8
70°-80°	1175.1	9.9
80°-90°	84.5	0.7
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°	11892.1	100.0
0°-180°	11892.1	100.0

Coefficient of Utilization



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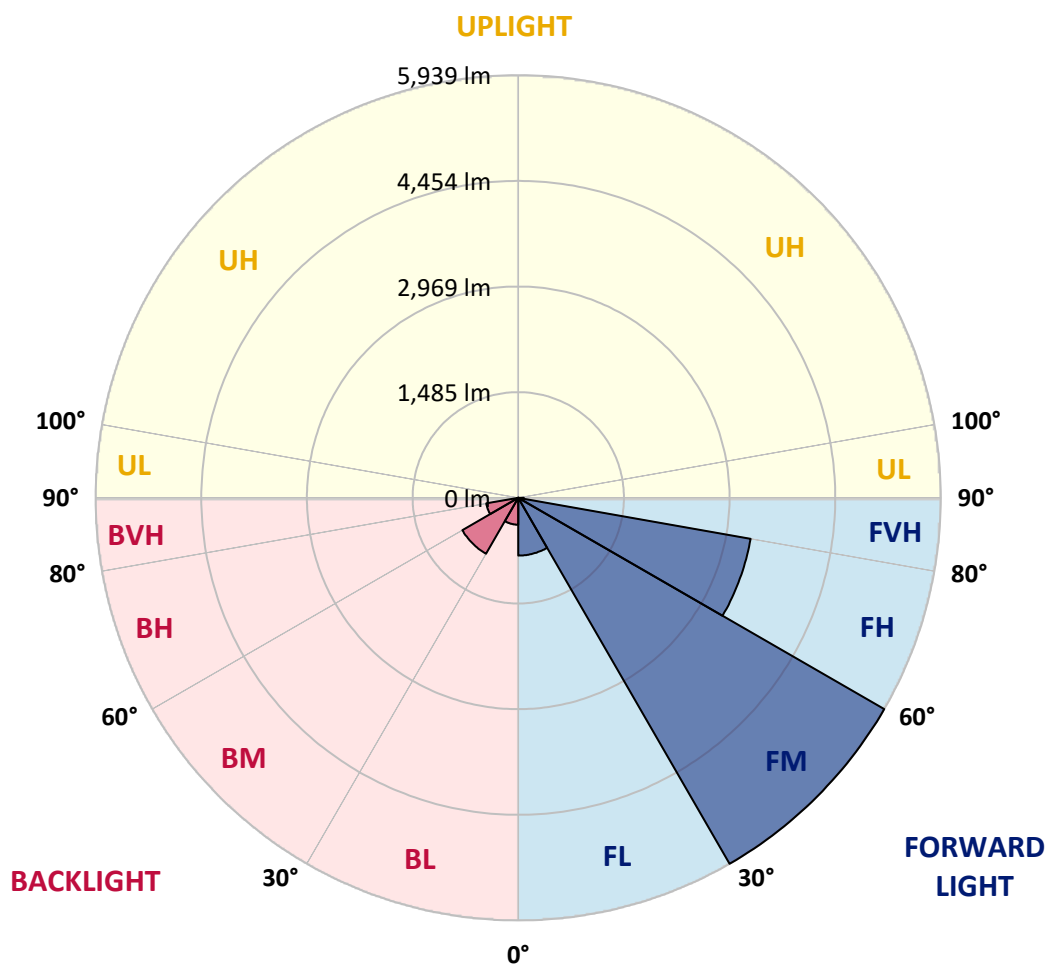
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	811.8	6.8			
FM	(30°-60°)	5938.6	49.9			
FH	(60°-80°)	3315.4	27.9			G2/5000
FVH	(80°-90°)	78.2	0.7			G1/100
BL	(0°-30°)	378.3	3.2	B1/500		
BM	(30°-60°)	907.1	7.6	B1/1000		
BH	(60°-80°)	456.3	3.8	B1/500		G1/500
BVH	(80°-90°)	6.3	0.1			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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1467.7	1467.7	1467.7	1467.7	1467.7	1467.7	1467.7	1467.7	1467.7	1467.7	1467.7
2.5°	1502.0	1497.9	1503.7	1501.2	1499.6	1496.3	1494.7	1493.0	1489.8	1487.4	1477.5
5°	1506.1	1503.7	1509.4	1514.3	1519.3	1524.2	1526.6	1529.9	1526.6	1520.1	1510.2
7.5°	1471.8	1470.2	1482.5	1497.1	1519.3	1538.0	1558.5	1570.0	1570.8	1568.4	1557.7
10°	1469.3	1465.2	1477.5	1495.5	1524.2	1557.7	1593.7	1618.3	1621.6	1632.1	1620.7
12.5°	1507.8	1503.7	1520.9	1540.5	1570.0	1605.1	1649.3	1683.7	1688.6	1703.3	1695.1
15°	1572.5	1566.7	1586.3	1611.7	1649.3	1689.4	1736.0	1767.1	1771.2	1789.2	1774.5
17.5°	1647.7	1641.9	1664.9	1691.9	1732.8	1787.6	1841.6	1876.0	1880.9	1892.4	1865.3
20°	1744.2	1736.9	1754.9	1779.4	1822.8	1888.3	1952.8	2001.9	2001.1	2001.1	1956.9
22.5°	1856.3	1844.9	1860.4	1880.1	1921.0	2000.3	2086.2	2144.3	2144.3	2121.3	2048.6
25°	1976.6	1965.1	1982.4	2000.3	2036.3	2126.3	2226.9	2298.9	2302.1	2262.9	2146.8
27.5°	2127.1	2112.4	2125.4	2146.8	2168.0	2259.6	2379.1	2462.6	2464.2	2403.6	2240.0
30°	2416.7	2375.0	2334.1	2311.2	2321.0	2411.8	2539.4	2631.9	2640.1	2556.7	2341.4
32.5°	2946.9	2938.7	2794.7	2606.6	2508.4	2575.4	2718.6	2829.8	2834.7	2727.6	2473.1
35°	3770.7	3760.9	3529.4	3171.0	2851.1	2794.7	2936.2	3067.9	3064.6	2943.6	2644.2
37.5°	4754.1	4745.1	4439.9	3960.5	3442.7	3126.0	3216.9	3355.1	3375.5	3216.9	2865.1
40°	5594.2	5560.7	5367.7	4905.4	4228.0	3675.9	3616.1	3707.7	3729.0	3540.9	3145.6
42.5°	6230.8	6202.2	6104.0	5815.1	5178.7	4489.0	4086.5	4121.6	4145.4	3919.6	3468.0
45°	6560.5	6554.0	6593.2	6566.3	6147.3	5487.1	4759.0	4612.5	4621.5	4339.3	3833.7
47.5°	6607.2	6603.9	6783.0	7036.6	6980.1	6612.9	5622.1	5224.5	5192.5	4813.0	4231.3
50°	6332.2	6325.7	6669.3	7144.7	7536.5	7558.6	6602.2	5914.1	5843.8	5303.0	4646.1
52.5°	5454.4	5452.8	6017.3	6808.4	7732.0	8386.6	7570.9	6671.7	6554.0	5821.7	5084.6
55°	4197.0	4227.2	4874.4	5809.5	7375.3	8785.0	8440.6	7512.7	7331.9	6343.7	5488.8
57.5°	2973.0	3017.2	3657.0	4489.8	6269.2	8549.3	9028.7	8355.4	8160.7	6864.0	5898.7
60°	1596.9	1636.2	2276.8	3270.9	4664.1	7670.7	9338.8	9086.8	8902.7	7358.2	6268.4
62.5°	951.5	964.5	1229.6	2111.6	3154.6	5860.1	9207.1	9644.0	9492.6	7773.0	6589.9
65°	683.2	685.6	819.0	1289.3	1915.2	3560.4	8283.4	9910.7	9864.1	8085.5	6828.0
67.5°	575.1	573.5	629.1	856.6	1304.9	1783.5	6348.6	9533.5	9731.6	8283.4	6963.0
70°	493.3	495.8	561.2	627.5	980.9	1009.5	3156.3	8300.7	8722.8	8335.8	6954.8
72.5°	367.4	375.6	436.0	571.8	740.4	694.5	1089.8	6154.7	6918.0	7854.0	6594.0
75°	259.3	263.4	306.8	481.0	552.3	505.6	556.4	3181.7	4160.2	6021.4	5397.1
77.5°	199.7	206.9	232.4	336.2	544.1	355.1	340.3	1101.2	1691.9	3637.3	3700.4
80°	108.0	121.1	167.7	243.0	382.0	251.1	168.5	438.5	573.5	1700.9	1426.8
82.5°	55.7	62.2	117.0	175.1	217.6	219.2	83.4	182.4	236.5	525.2	195.6
85°	22.1	27.0	78.5	96.6	112.0	108.0	37.6	73.6	85.1	145.7	59.8
87.5°	4.9	8.2	28.6	22.1	21.3	22.9	9.0	17.2	16.4	17.2	10.7
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°	1467.7	1467.7	1467.7	1467.7	1467.7	1467.7	1467.7	1467.7	1467.7	1467.7	1467.7
2.5°	1476.7	1473.4	1464.4	1454.6	1443.2	1436.6	1432.5	1431.7	1426.0	1421.9	1426.0
5°	1501.2	1497.9	1480.8	1460.3	1438.3	1421.1	1404.7	1390.0	1368.7	1364.6	1362.9
7.5°	1550.3	1541.3	1513.5	1485.7	1444.0	1394.1	1333.5	1264.0	1201.8	1183.0	1174.0
10°	1610.9	1598.6	1563.4	1514.3	1421.9	1286.1	1139.6	1003.8	895.8	865.6	854.1
12.5°	1679.6	1669.0	1622.4	1531.6	1329.4	1083.2	859.1	690.5	585.8	559.5	552.3
15°	1761.4	1745.9	1681.2	1505.3	1164.2	823.1	589.9	490.1	452.4	447.5	442.6
17.5°	1848.2	1822.8	1733.6	1411.2	941.7	585.0	455.7	427.0	410.7	405.8	403.3
20°	1927.5	1894.7	1764.6	1268.9	703.6	455.7	408.3	389.4	374.7	369.0	365.7
22.5°	2006.8	1960.2	1764.6	1075.0	527.7	404.2	374.7	357.5	340.3	333.0	328.9
25°	2089.5	2027.3	1733.6	859.1	424.6	370.6	342.8	324.0	309.2	300.2	296.9
27.5°	2169.6	2083.7	1662.4	654.5	378.0	341.1	313.3	295.3	281.5	274.9	274.9
30°	2245.8	2139.4	1562.6	496.6	347.7	312.5	286.4	270.8	256.9	250.3	251.1
32.5°	2348.8	2209.7	1456.2	407.4	321.5	285.6	261.8	247.0	234.8	229.9	229.9
35°	2492.0	2313.6	1364.6	400.1	299.4	263.4	239.7	225.8	213.5	209.4	209.4
37.5°	2694.9	2481.3	1316.3	449.2	281.5	243.8	221.7	206.9	195.6	192.3	191.5
40°	2945.2	2708.8	1342.5	498.3	269.2	226.6	205.3	190.6	180.8	176.7	175.9
42.5°	3242.2	2989.4	1487.4	535.9	261.0	211.9	189.8	173.4	166.9	165.2	165.2
45°	3583.4	3297.8	1709.1	575.9	247.8	198.0	174.2	162.0	157.0	156.2	155.5
47.5°	3971.2	3636.5	1966.0	625.9	234.8	184.9	162.0	153.9	149.8	148.1	148.1
50°	4355.6	3977.7	2230.2	653.6	224.2	172.6	152.2	145.7	142.4	141.6	141.6
52.5°	4758.2	4328.7	2443.7	627.5	215.1	162.8	144.0	139.1	135.8	135.0	135.0
55°	5141.9	4612.5	2480.5	532.6	197.2	153.0	135.0	132.5	128.4	128.4	127.6
57.5°	5472.4	4754.9	2220.4	391.0	179.2	138.3	126.0	123.5	120.2	119.4	118.6
60°	5775.9	4714.0	1714.0	263.4	159.5	123.5	114.5	112.9	109.7	105.6	104.8
62.5°	5946.9	4534.0	1172.4	171.8	139.9	108.0	101.5	100.7	93.3	85.1	83.4
65°	6011.5	4164.3	731.4	125.2	117.0	92.5	87.5	85.9	75.2	66.3	65.5
67.5°	5955.0	3555.5	369.0	99.0	92.5	76.9	72.0	72.0	64.7	56.5	55.7
70°	5729.2	2665.4	155.5	79.3	71.1	58.9	58.9	62.2	54.8	45.8	45.0
72.5°	5239.2	1793.3	82.6	60.6	53.2	41.7	48.3	50.7	43.4	34.3	34.3
75°	4165.1	1093.8	57.3	45.0	33.5	29.4	36.8	38.4	29.4	22.9	22.1
77.5°	2848.7	628.3	38.4	28.6	21.3	17.2	25.3	23.7	15.6	10.7	11.5
80°	1250.9	261.8	22.1	13.1	8.2	6.6	9.0	6.6	4.9	3.3	3.3
82.5°	146.5	61.4	8.2	4.9	3.3	1.6	0.8	0.0	0.0	0.0	0.0
85°	30.2	7.4	4.1	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.7	1.6	0.8	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)