

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: P962462

Luminaire Tested: **NAV-SB2C-735-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962462
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-SB2C-735-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 615mA 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: 11732.1 lumens
Efficiency: N/A
Efficacy: 116.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 100.9
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

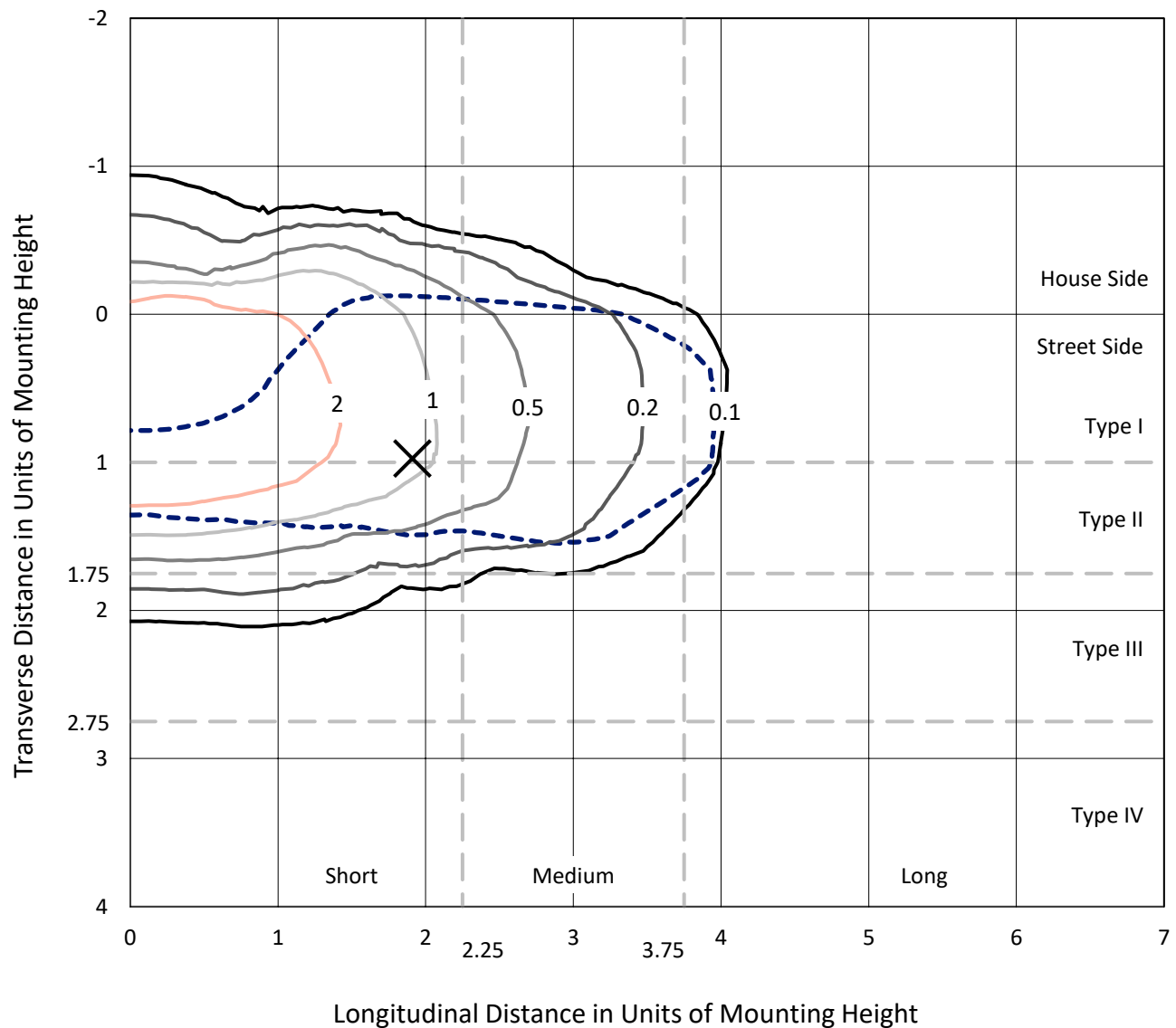


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Iso-Footcandle Lines of Horizontal Illumination

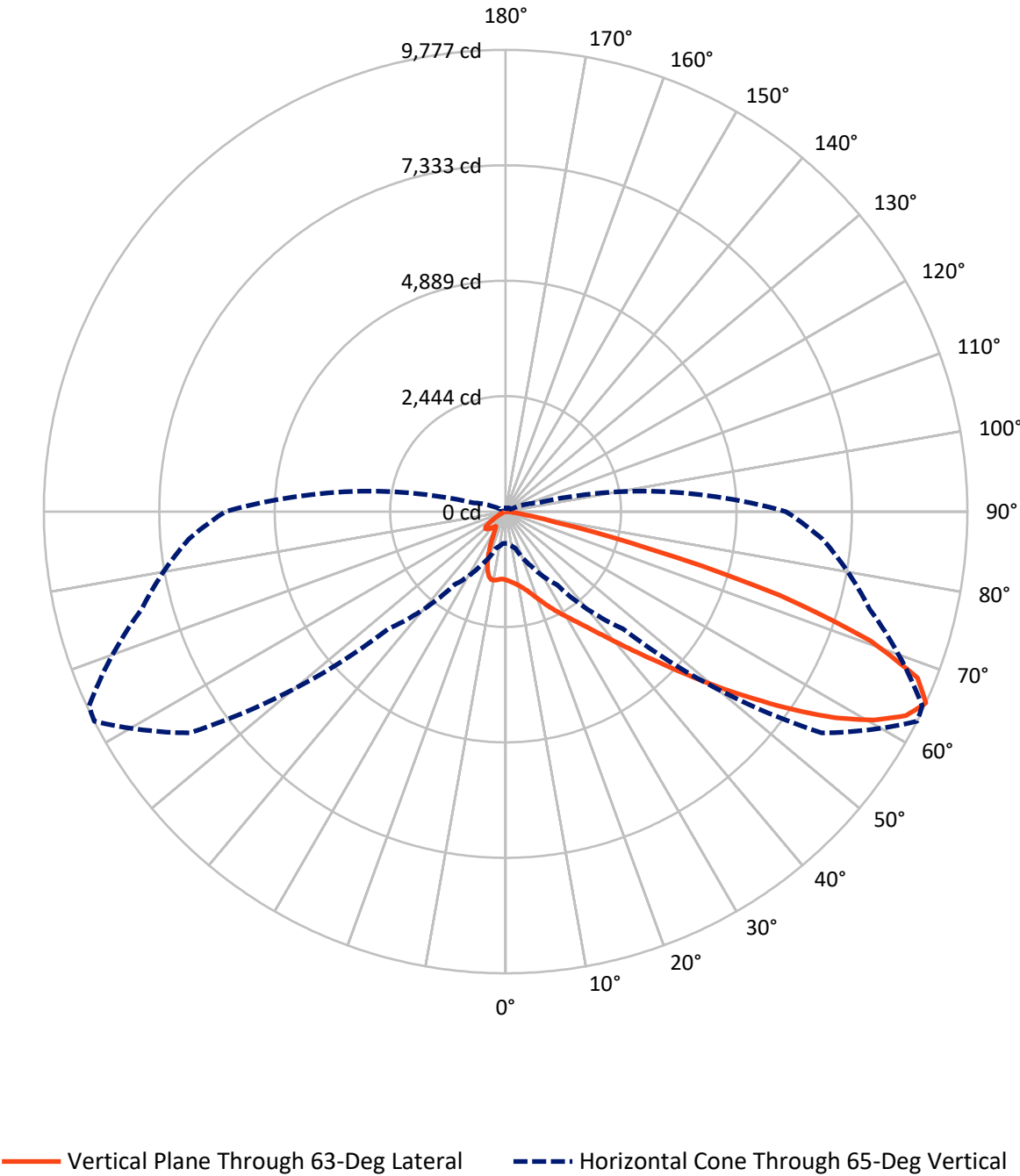
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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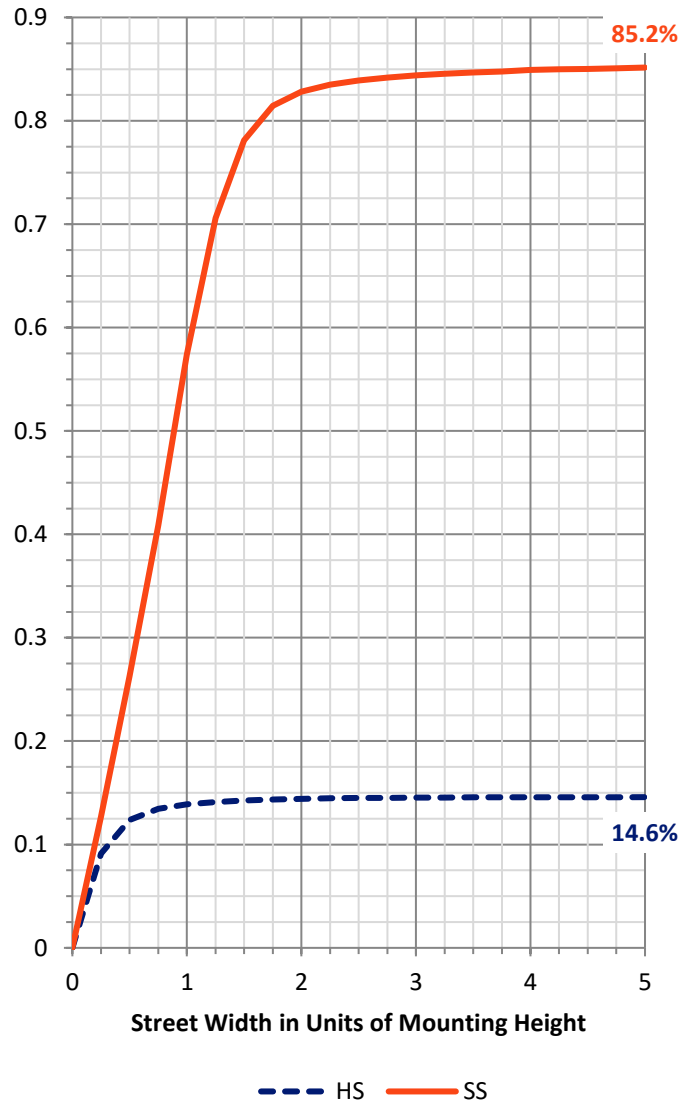
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1724.5	0.0	1724.5
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	10007.6	0.0	10007.6
	% Fixture	85.3	0.0	85.3
Total	Lumens	11732.1	0.0	11732.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.4	1.2
10°-20°	378.5	3.2
20°-30°	659.1	5.6
30°-40°	1188.0	10.1
40°-50°	2356.2	20.1
50°-60°	3209.5	27.4
60°-70°	2561.8	21.8
70°-80°	1159.3	9.9
80°-90°	83.3	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°	11732.1	100.0
0°-180°	11732.1	100.0

Coefficient of Utilization



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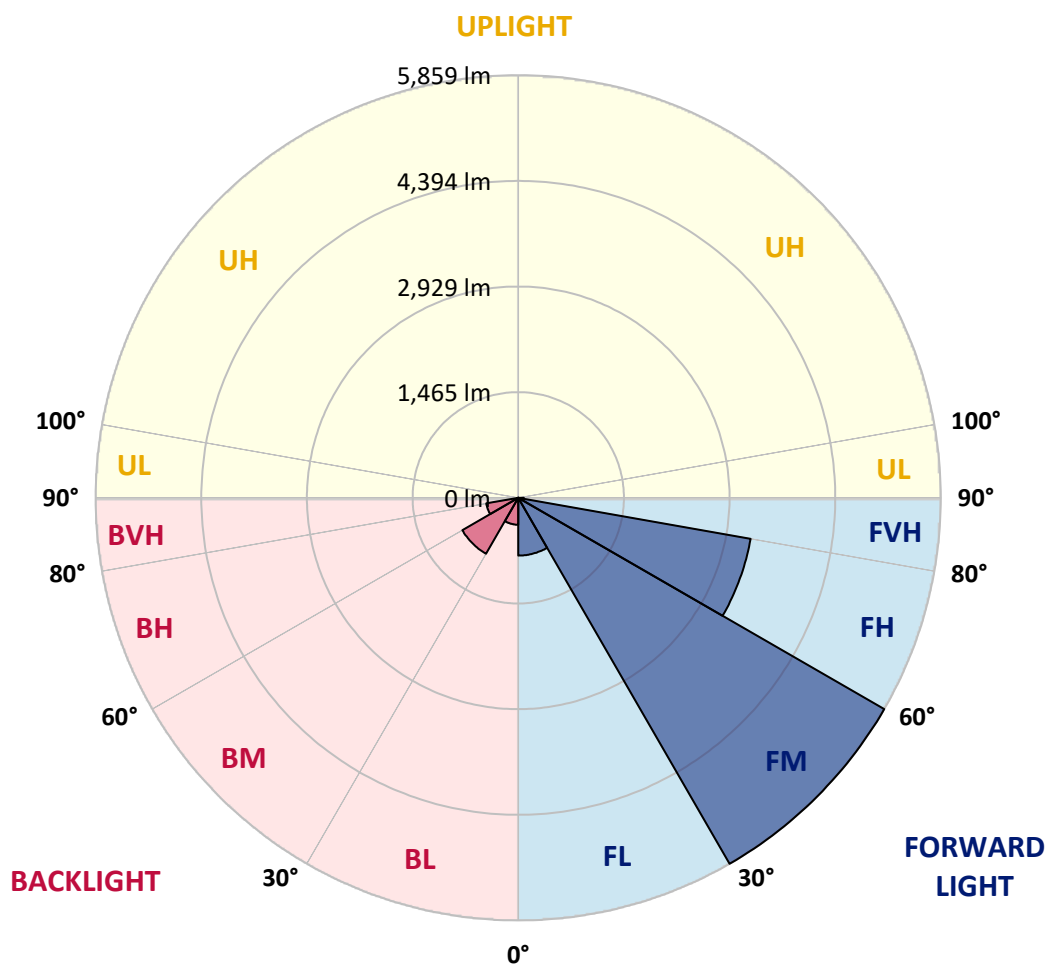
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	800.9	6.8			
FM	(30°-60°)	5858.7	49.9			
FH	(60°-80°)	3270.9	27.9			G2/5000
FVH	(80°-90°)	77.1	0.7			G1/100
BL	(0°-30°)	373.2	3.2	B1/500		
BM	(30°-60°)	894.9	7.6	B1/1000		
BH	(60°-80°)	450.2	3.8	B1/500		G1/500
BVH	(80°-90°)	6.2	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°	1448.0	1448.0	1448.0	1448.0	1448.0	1448.0	1448.0	1448.0	1448.0	1448.0	1448.0
2.5°	1481.8	1477.8	1483.5	1481.0	1479.5	1476.2	1474.6	1473.0	1469.7	1467.4	1457.7
5°	1485.9	1483.5	1489.1	1493.9	1498.9	1503.7	1506.0	1509.3	1506.0	1499.6	1489.9
7.5°	1452.0	1450.4	1462.5	1477.0	1498.9	1517.4	1537.6	1548.9	1549.7	1547.2	1536.8
10°	1449.6	1445.6	1457.7	1475.4	1503.7	1536.8	1572.2	1596.4	1599.7	1610.2	1598.9
12.5°	1487.5	1483.5	1500.4	1519.8	1548.9	1583.5	1627.2	1661.0	1665.9	1680.4	1672.4
15°	1551.2	1545.6	1565.0	1590.0	1627.2	1666.6	1712.7	1743.4	1747.4	1765.2	1750.6
17.5°	1625.5	1619.9	1642.5	1669.1	1709.5	1763.5	1816.8	1850.7	1855.6	1866.8	1840.2
20°	1720.8	1713.5	1731.2	1755.5	1798.3	1862.8	1926.6	1975.0	1974.3	1974.3	1930.6
22.5°	1831.4	1820.1	1835.4	1854.7	1895.1	1973.4	2058.2	2115.5	2115.5	2092.8	2021.0
25°	1950.0	1938.7	1955.6	1973.4	2008.9	2097.7	2197.0	2268.0	2271.2	2232.4	2117.9
27.5°	2098.5	2083.9	2096.8	2117.9	2138.9	2229.3	2347.1	2429.5	2431.0	2371.3	2209.9
30°	2384.3	2343.0	2302.7	2280.1	2289.7	2379.3	2505.3	2596.5	2604.5	2522.2	2309.9
32.5°	2907.2	2899.2	2757.1	2571.5	2474.7	2540.8	2682.0	2791.8	2796.7	2690.9	2439.9
35°	3720.0	3710.3	3481.9	3128.4	2812.8	2757.1	2896.8	3026.7	3023.4	2904.0	2608.6
37.5°	4690.2	4681.3	4380.2	3907.3	3396.3	3084.0	3173.6	3310.0	3330.1	3173.6	2826.5
40°	5519.1	5486.0	5295.5	4839.4	4171.1	3626.3	3567.4	3657.8	3678.8	3493.2	3103.4
42.5°	6147.0	6118.7	6021.9	5737.0	5109.0	4428.6	4031.5	4066.3	4089.6	3866.9	3421.3
45°	6472.3	6465.8	6504.5	6477.9	6064.7	5413.3	4695.0	4550.5	4559.4	4280.9	3782.1
47.5°	6518.3	6515.0	6691.8	6942.0	6886.4	6523.9	5546.5	5154.2	5122.7	4748.3	4174.4
50°	6247.1	6240.6	6579.6	7048.5	7435.1	7457.0	6513.5	5834.6	5765.2	5231.7	4583.6
52.5°	5381.0	5379.4	5936.4	6716.8	7628.0	8273.8	7469.1	6582.0	6465.8	5743.5	5016.2
55°	4140.5	4170.4	4808.8	5731.4	7276.2	8666.8	8327.0	7411.8	7233.4	6258.3	5415.0
57.5°	2933.0	2976.6	3607.8	4429.4	6185.0	8434.4	8907.4	8243.0	8051.0	6771.8	5819.3
60°	1575.5	1614.3	2246.2	3226.9	4601.3	7567.6	9213.2	8964.6	8783.0	7259.3	6184.1
62.5°	938.7	951.6	1213.1	2083.2	3112.2	5781.4	9083.3	9514.3	9365.0	7668.4	6501.4
65°	673.9	676.4	807.9	1272.0	1889.5	3512.6	8172.0	9777.4	9731.5	7976.8	6736.2
67.5°	567.4	565.8	620.6	845.0	1287.4	1759.5	6263.3	9405.3	9600.7	8172.0	6869.3
70°	486.7	489.1	553.7	619.1	967.7	996.0	3113.8	8189.0	8605.5	8223.7	6861.4
72.5°	362.4	370.4	430.2	564.2	730.4	685.2	1075.1	6071.9	6825.0	7748.3	6505.4
75°	255.8	259.9	302.7	474.6	544.8	498.8	548.9	3138.9	4104.2	5940.4	5324.6
77.5°	196.9	204.2	229.2	331.7	536.7	350.2	335.8	1086.4	1669.1	3588.4	3650.6
80°	106.5	119.4	165.4	239.7	376.9	247.7	166.3	432.7	565.8	1678.0	1407.6
82.5°	54.8	61.3	115.4	172.7	214.7	216.3	82.3	180.0	233.3	518.1	192.9
85°	21.8	26.6	77.5	95.2	110.6	106.5	37.1	72.7	83.9	143.7	58.9
87.5°	4.8	8.1	28.3	21.8	21.0	22.5	8.9	16.9	16.1	16.9	10.5
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°	1448.0	1448.0	1448.0	1448.0	1448.0	1448.0	1448.0	1448.0	1448.0	1448.0	1448.0
2.5°	1456.8	1453.7	1444.7	1435.1	1423.7	1417.3	1413.3	1412.4	1406.8	1402.8	1406.8
5°	1481.0	1477.8	1460.9	1440.7	1418.9	1402.0	1385.8	1371.2	1350.3	1346.2	1344.7
7.5°	1529.5	1520.6	1493.1	1465.7	1424.5	1375.3	1315.6	1247.0	1185.6	1167.1	1158.2
10°	1589.3	1577.1	1542.4	1493.9	1402.8	1268.7	1124.3	990.4	883.8	853.9	842.7
12.5°	1657.0	1646.6	1600.5	1511.0	1311.6	1068.7	847.5	681.2	577.9	552.1	544.8
15°	1737.7	1722.4	1658.7	1485.1	1148.5	812.0	581.9	483.5	446.3	441.5	436.6
17.5°	1823.3	1798.3	1710.3	1392.3	929.0	577.1	449.6	421.3	405.2	400.4	397.9
20°	1901.6	1869.3	1741.0	1251.8	694.1	449.6	402.7	384.2	369.6	364.0	360.8
22.5°	1979.9	1933.9	1741.0	1060.6	520.6	398.7	369.6	352.7	335.8	328.5	324.4
25°	2061.4	2000.1	1710.3	847.5	418.9	365.6	338.1	319.6	305.0	296.2	292.9
27.5°	2140.5	2055.7	1640.1	645.6	372.9	336.6	309.1	291.4	277.7	271.2	271.2
30°	2215.5	2110.6	1541.6	489.9	343.1	308.3	282.5	267.1	253.5	247.0	247.7
32.5°	2317.2	2180.1	1436.6	401.9	317.2	281.7	258.3	243.7	231.6	226.8	226.8
35°	2458.5	2282.6	1346.2	394.7	295.4	259.9	236.5	222.7	210.6	206.6	206.6
37.5°	2658.6	2448.0	1298.7	443.1	277.7	240.6	218.7	204.2	192.9	189.6	188.9
40°	2905.7	2672.4	1324.5	491.5	265.6	223.6	202.5	188.1	178.4	174.4	173.5
42.5°	3198.6	2949.2	1467.4	528.7	257.5	209.0	187.3	171.1	164.6	163.1	163.1
45°	3535.2	3253.5	1686.0	568.3	244.6	195.4	171.9	159.8	155.0	154.2	153.3
47.5°	3917.8	3587.6	1939.5	617.5	231.6	182.4	159.8	151.7	147.7	146.1	146.1
50°	4297.1	3924.2	2200.2	644.9	221.2	170.3	150.2	143.7	140.4	139.6	139.6
52.5°	4694.2	4270.5	2410.9	619.1	212.3	160.6	142.1	137.2	134.0	133.1	133.1
55°	5072.7	4550.5	2447.2	525.4	194.5	150.9	133.1	130.8	126.7	126.7	125.9
57.5°	5398.8	4691.0	2190.5	385.8	176.7	136.4	124.3	121.9	118.7	117.9	117.1
60°	5698.3	4650.6	1690.9	259.9	157.3	121.9	113.0	111.4	108.1	104.1	103.3
62.5°	5866.9	4473.0	1156.6	169.5	138.1	106.5	100.0	99.3	92.0	83.9	82.3
65°	5930.6	4108.2	721.6	123.5	115.4	91.2	86.4	84.8	74.2	65.4	64.6
67.5°	5875.0	3507.8	364.0	97.7	91.2	75.8	71.0	71.0	63.8	55.7	54.8
70°	5652.3	2629.6	153.3	78.3	70.2	58.1	58.1	61.3	54.1	45.2	44.4
72.5°	5168.8	1769.3	81.5	59.8	52.5	41.2	47.7	50.0	42.7	33.9	33.9
75°	4109.0	1079.1	56.5	44.4	33.1	29.0	36.3	37.9	29.0	22.5	21.8
77.5°	2810.3	619.8	37.9	28.3	21.0	16.9	25.0	23.4	15.4	10.5	11.3
80°	1234.1	258.3	21.8	12.9	8.1	6.5	8.9	6.5	4.8	3.2	3.2
82.5°	144.5	60.6	8.1	4.8	3.2	1.6	0.8	0.0	0.0	0.0	0.0
85°	29.8	7.3	4.0	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.6	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)