

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: P964170

Luminaire Tested: **NAV-SB3B-827-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964170
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-827-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11810.1 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - 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

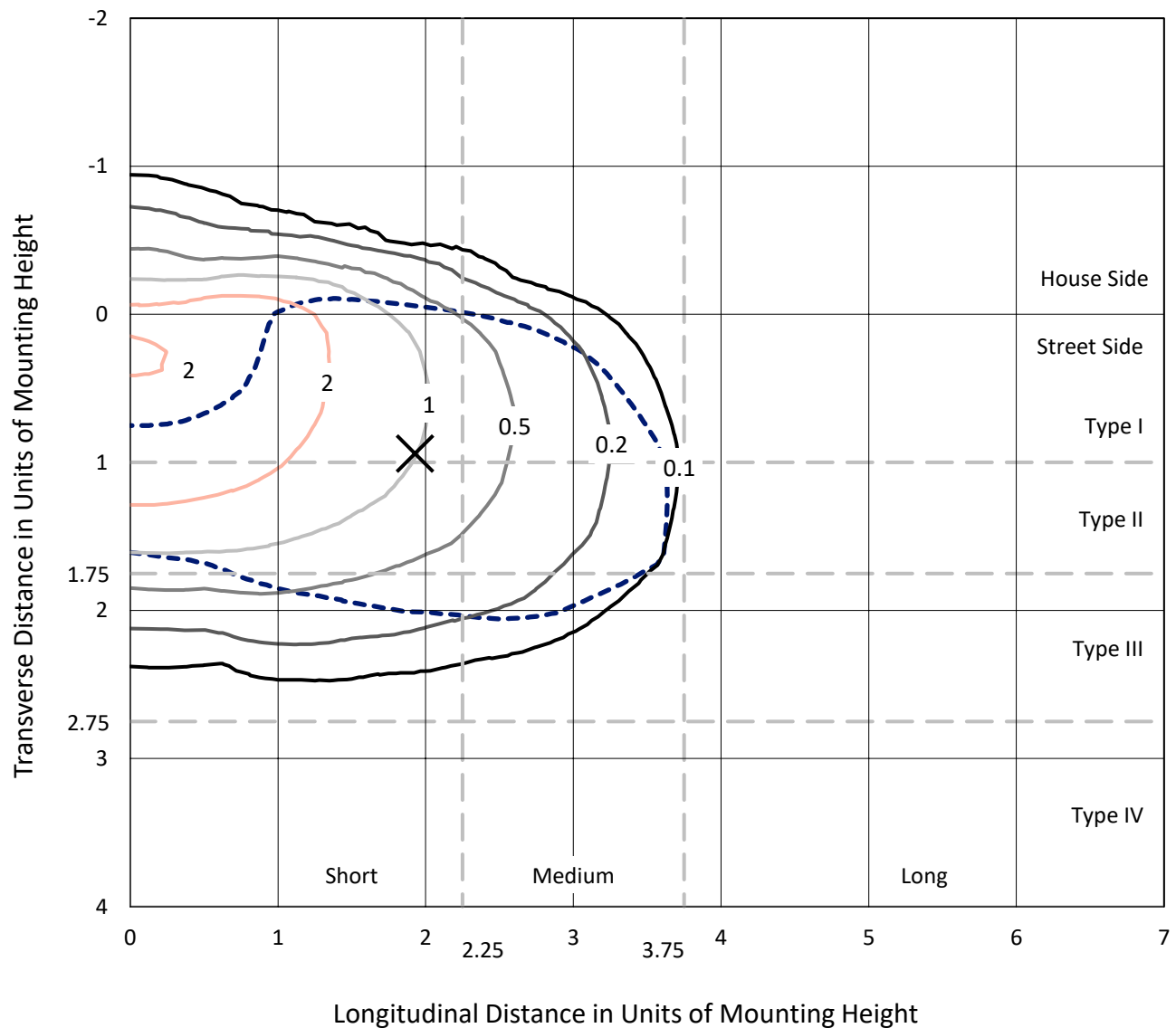


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Iso-Footcandle Lines of Horizontal Illumination

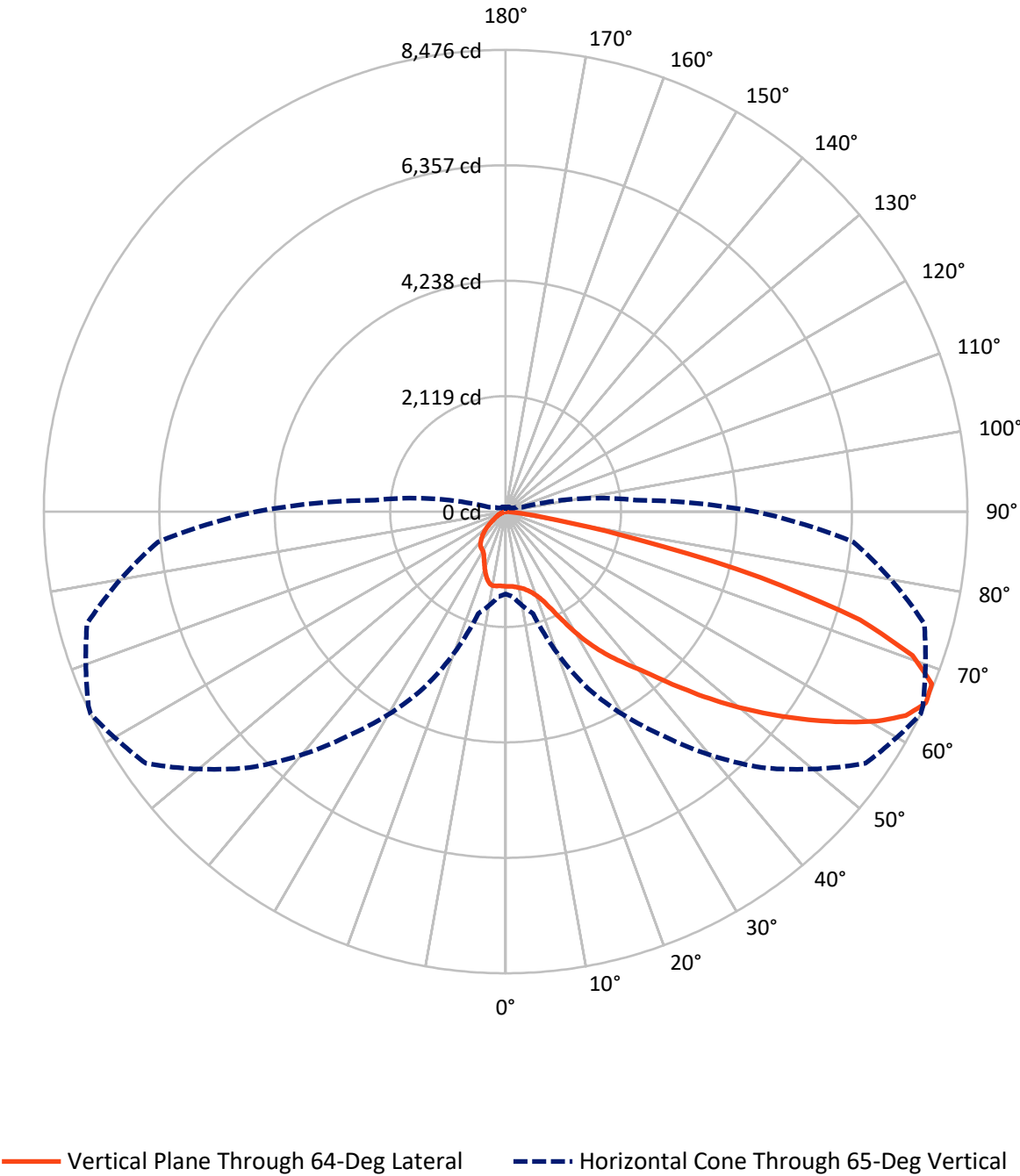
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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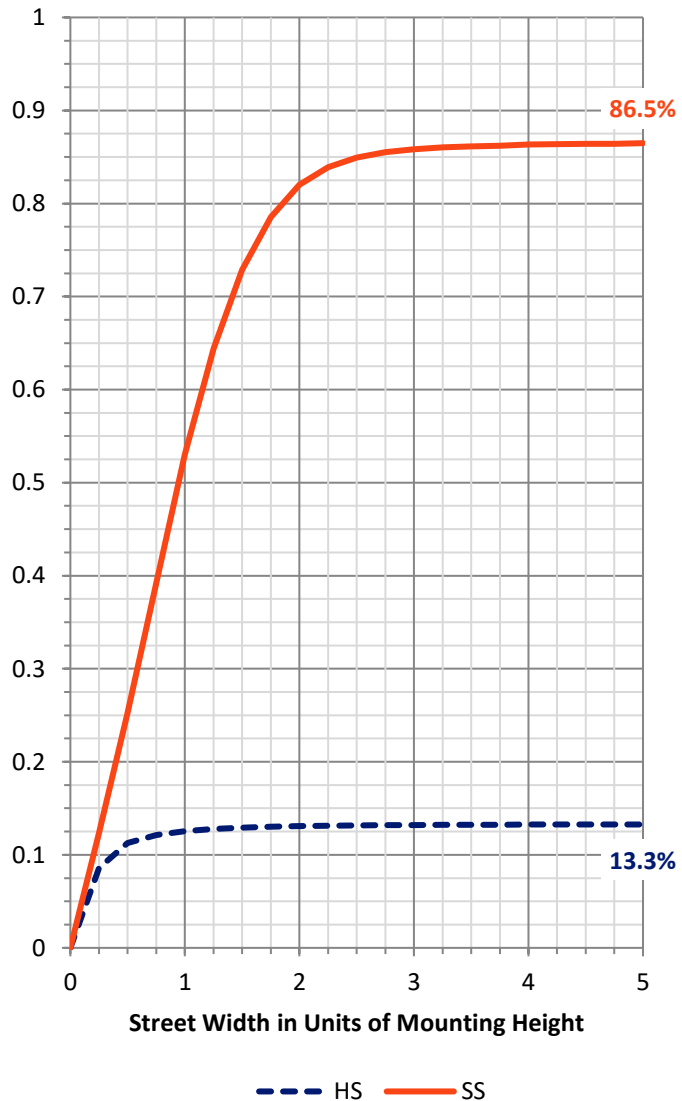
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1579.4	0.0	1579.4
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	10230.7	0.0	10230.7
	% Fixture	86.6	0.0	86.6
Total	Lumens	11810.1	0.0	11810.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.7	1.1
10°-20°	343.7	2.9
20°-30°	651.3	5.5
30°-40°	1318.0	11.2
40°-50°	2245.2	19.0
50°-60°	3053.4	25.9
60°-70°	2867.3	24.3
70°-80°	1148.8	9.7
80°-90°	55.7	0.5
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°	11810.1	100.0
0°-180°	11810.1	100.0

Coefficient of Utilization



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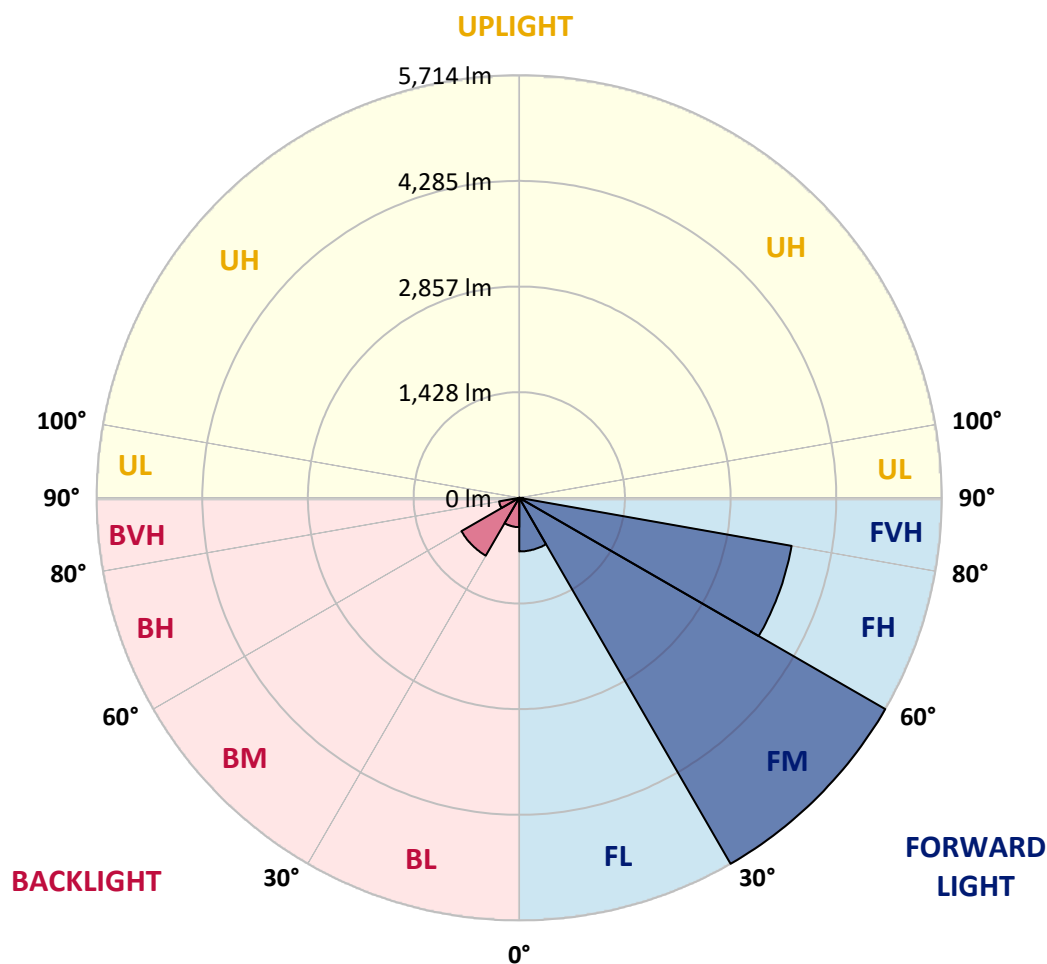
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	725.3	6.1			
FM	(30°-60°)	5713.7	48.4			
FH	(60°-80°)	3738.8	31.7			G2/5000
FVH	(80°-90°)	52.9	0.4			G1/100
BL	(0°-30°)	396.5	3.4	B1/500		
BM	(30°-60°)	902.9	7.6	B1/1000		
BH	(60°-80°)	277.2	2.3	B1/500		G1/500
BVH	(80°-90°)	2.7	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-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1373.6	1373.6	1373.6	1373.6	1373.6	1373.6	1373.6	1373.6	1373.6	1373.6	1373.6
2.5°	1368.9	1378.4	1376.0	1373.6	1372.9	1374.4	1375.2	1374.4	1374.4	1374.4	1375.2
5°	1342.7	1350.6	1350.6	1356.2	1364.2	1373.6	1380.8	1382.3	1384.0	1386.3	1385.5
7.5°	1292.8	1299.2	1304.0	1322.1	1341.9	1367.2	1388.7	1399.7	1401.4	1410.1	1413.2
10°	1258.8	1266.8	1274.7	1293.7	1322.1	1360.2	1396.6	1423.5	1427.5	1448.0	1457.6
12.5°	1257.3	1265.2	1275.4	1296.0	1329.3	1369.7	1414.0	1452.8	1459.9	1490.0	1509.8
15°	1273.9	1283.4	1292.8	1318.3	1353.8	1402.9	1450.5	1498.8	1505.8	1548.6	1570.0
17.5°	1307.9	1320.6	1327.7	1353.0	1391.0	1445.7	1508.2	1563.6	1570.0	1619.8	1646.8
20°	1375.2	1390.2	1392.7	1413.2	1450.5	1509.0	1583.4	1652.3	1660.2	1717.3	1747.3
22.5°	1514.5	1536.0	1516.9	1527.2	1560.5	1619.1	1699.9	1786.9	1798.0	1862.9	1889.8
25°	1760.0	1790.1	1741.0	1723.5	1737.8	1798.8	1900.1	2010.1	2022.8	2075.1	2088.5
27.5°	2242.2	2203.3	2128.9	2056.0	2013.3	2048.2	2162.1	2298.4	2314.1	2364.9	2349.0
30°	2771.8	2737.8	2637.2	2475.7	2374.4	2368.8	2474.1	2626.2	2644.3	2692.7	2644.3
32.5°	3302.2	3269.7	3160.6	2961.8	2786.1	2698.9	2771.8	2940.4	2950.0	2980.8	2909.6
35°	3824.0	3790.8	3681.5	3478.0	3261.9	3063.9	3049.7	3239.7	3242.9	3275.4	3169.3
37.5°	4348.9	4321.2	4204.9	4005.3	3792.3	3519.2	3387.0	3523.1	3527.1	3558.8	3448.7
40°	4723.4	4735.3	4655.3	4500.9	4318.0	4019.5	3765.4	3824.8	3801.0	3854.1	3788.4
42.5°	5044.8	5068.6	4998.9	4921.3	4815.2	4552.3	4234.1	4223.8	4185.8	4214.3	4146.2
45°	5322.7	5342.5	5280.0	5261.7	5259.4	5074.9	4746.4	4684.6	4631.6	4626.0	4544.4
47.5°	5424.8	5462.8	5489.8	5550.8	5669.5	5591.9	5276.0	5180.2	5120.8	5077.3	4948.3
50°	5463.7	5504.0	5595.9	5773.2	6054.3	6087.5	5803.3	5695.6	5622.7	5543.6	5353.6
52.5°	5411.4	5483.4	5607.0	5905.4	6313.2	6485.0	6309.2	6215.0	6131.9	6002.8	5720.9
55°	5103.4	5175.4	5428.0	5903.8	6442.2	6763.7	6787.4	6745.4	6652.0	6448.6	6017.9
57.5°	4454.2	4561.0	4960.9	5702.8	6439.9	7003.5	7256.1	7286.2	7181.7	6890.4	6251.4
60°	3554.8	3699.7	4187.4	5257.0	6241.1	7133.4	7667.0	7817.5	7706.6	7325.8	6440.6
62.5°	2480.5	2648.3	3109.8	4558.7	5786.6	7040.0	7967.0	8245.0	8161.0	7715.3	6513.5
65°	1513.0	1566.8	1938.9	3587.3	5014.0	6648.9	8059.7	8476.1	8448.5	7953.6	6405.8
67.5°	1007.9	1053.0	1159.9	2459.9	3892.1	5867.4	7838.0	8435.8	8443.6	7914.8	6011.5
70°	607.2	646.1	715.8	1430.6	2522.4	4644.2	7151.6	7921.1	7967.0	7396.2	5264.1
72.5°	250.2	276.3	339.7	648.4	1306.4	2947.6	5694.8	6800.9	6907.8	6219.0	4040.1
75°	141.8	155.2	199.5	325.4	566.8	1373.6	3449.5	4827.9	4985.5	4286.3	2430.6
77.5°	94.2	100.6	129.0	210.6	319.1	468.7	1474.2	2515.2	2816.2	2341.1	1052.2
80°	63.3	68.9	88.7	140.9	207.5	201.1	469.4	931.8	1146.4	804.4	256.6
82.5°	42.7	43.6	63.3	92.7	131.4	97.4	138.6	289.8	364.2	232.8	97.4
85°	24.5	23.8	46.7	53.8	58.6	40.4	41.9	87.1	114.0	98.2	55.5
87.5°	3.2	4.7	18.2	14.2	7.9	8.7	8.7	15.1	22.1	23.8	11.9
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°	1373.6	1373.6	1373.6	1373.6	1373.6	1373.6	1373.6	1373.6	1373.6	1373.6	1373.6
2.5°	1375.2	1374.4	1372.1	1369.7	1364.2	1361.0	1362.5	1361.0	1360.2	1361.0	1364.2
5°	1385.5	1383.1	1376.8	1368.9	1357.8	1344.3	1335.7	1323.0	1311.1	1304.0	1305.5
7.5°	1413.2	1410.8	1402.1	1380.0	1344.3	1288.1	1236.7	1191.6	1157.5	1137.8	1138.5
10°	1457.6	1453.6	1440.1	1391.0	1297.6	1175.0	1072.8	988.1	932.6	906.5	904.2
12.5°	1509.8	1505.0	1481.3	1380.8	1209.0	1017.3	876.5	782.2	730.7	707.8	705.4
15°	1571.5	1565.3	1518.5	1331.7	1079.9	843.2	714.1	643.7	610.4	589.8	590.6
17.5°	1648.4	1637.2	1546.2	1258.1	939.7	710.2	614.4	561.3	532.1	512.2	510.7
20°	1748.1	1729.9	1568.4	1170.1	810.7	626.3	547.0	502.8	480.6	463.2	460.0
22.5°	1887.4	1861.3	1595.3	1075.1	719.7	568.5	497.2	464.7	446.5	426.7	423.5
25°	2060.0	2029.2	1628.5	987.3	657.1	518.5	460.7	433.9	412.5	389.5	387.1
27.5°	2301.5	2246.1	1668.2	915.2	603.3	475.8	427.5	397.4	372.9	353.9	349.9
30°	2570.7	2479.7	1703.0	871.7	554.2	436.2	384.0	353.9	331.0	317.4	315.1
32.5°	2825.6	2702.1	1725.9	852.7	509.8	391.1	336.5	304.0	286.6	282.6	285.1
35°	3066.3	2903.2	1723.5	834.5	470.3	345.9	289.8	256.6	243.0	245.4	245.4
37.5°	3343.4	3117.7	1706.9	806.0	437.8	304.8	249.4	220.1	208.2	209.0	212.2
40°	3665.7	3365.6	1696.7	752.1	402.2	266.8	216.2	192.4	183.7	180.5	179.7
42.5°	4009.3	3605.4	1698.2	691.2	357.8	232.8	193.2	173.4	165.4	163.1	162.3
45°	4354.4	3834.3	1700.6	627.8	311.2	206.6	176.5	159.9	155.2	152.0	152.0
47.5°	4679.0	4029.1	1656.3	559.8	265.3	186.9	163.1	152.0	148.0	144.1	144.1
50°	4981.5	4158.9	1549.4	480.6	228.8	171.0	152.8	144.9	140.9	136.9	136.9
52.5°	5216.6	4179.4	1372.9	399.0	203.5	159.2	146.5	139.3	134.6	130.6	129.9
55°	5321.2	4050.4	1121.9	323.0	183.7	148.8	140.1	133.0	127.5	123.5	122.7
57.5°	5294.2	3778.9	874.8	259.6	164.7	138.6	132.2	127.5	121.2	114.8	114.0
60°	5162.0	3415.5	659.5	216.2	147.3	127.5	123.5	119.5	110.8	101.4	99.7
62.5°	4933.2	2958.7	470.3	179.0	128.2	114.8	113.3	110.1	97.4	79.9	78.4
65°	4583.3	2403.6	316.7	148.8	110.1	100.6	101.4	95.8	79.1	59.3	57.8
67.5°	4071.8	1757.6	202.6	122.0	91.8	83.9	84.7	81.6	67.3	50.6	48.3
70°	3420.2	1163.8	132.2	92.7	73.6	64.9	69.7	70.4	57.0	41.2	39.6
72.5°	2507.4	687.3	92.7	68.9	53.8	45.1	57.0	58.6	45.9	30.9	29.3
75°	1429.1	326.2	69.7	49.9	33.2	31.7	44.4	44.4	31.7	20.6	19.0
77.5°	600.1	136.2	49.1	32.5	19.0	18.2	30.1	27.7	15.8	9.5	9.5
80°	173.4	61.0	26.1	15.8	7.9	7.2	11.9	8.7	4.0	1.5	1.5
82.5°	68.1	27.0	10.2	6.4	3.2	3.2	1.5	0.0	0.0	0.0	0.0
85°	40.4	11.1	4.7	2.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.2	2.4	1.5	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)