

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: P962586

Luminaire Tested: **NAV-SB2C-827-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962586
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-827-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 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: 10201.8 lumens
Efficiency: N/A
Efficacy: 101.1 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

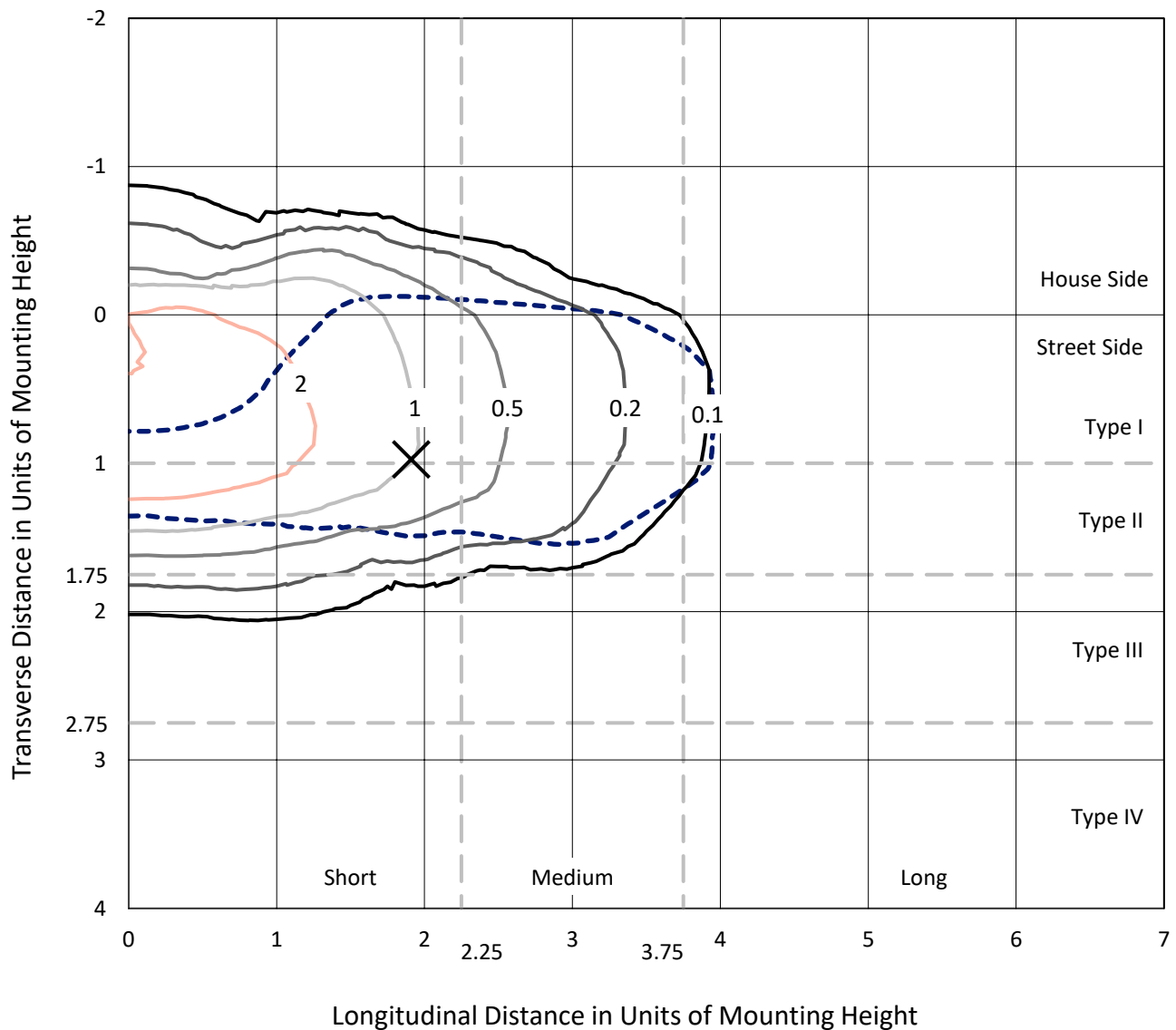


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Iso-Footcandle Lines of Horizontal Illumination

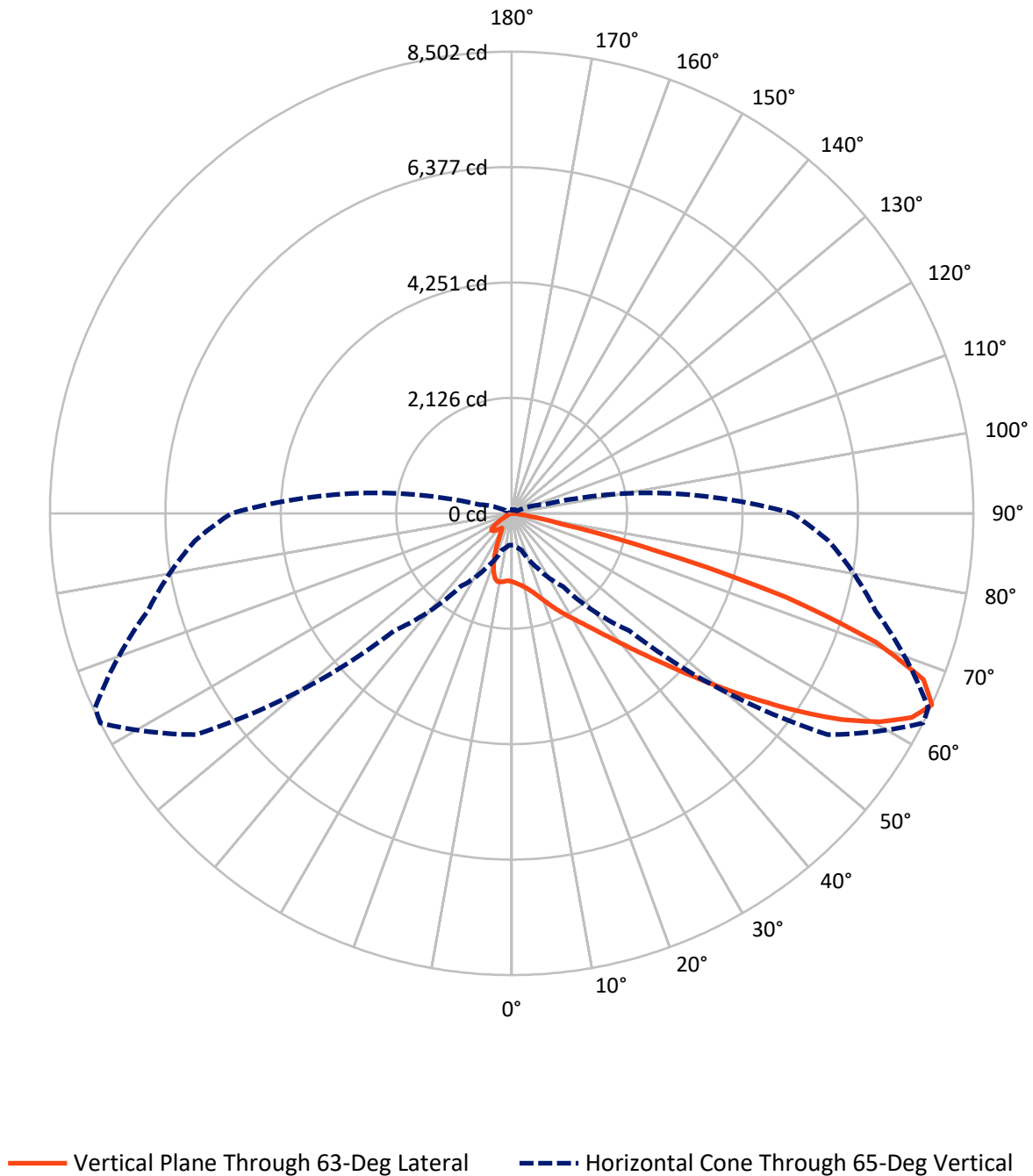
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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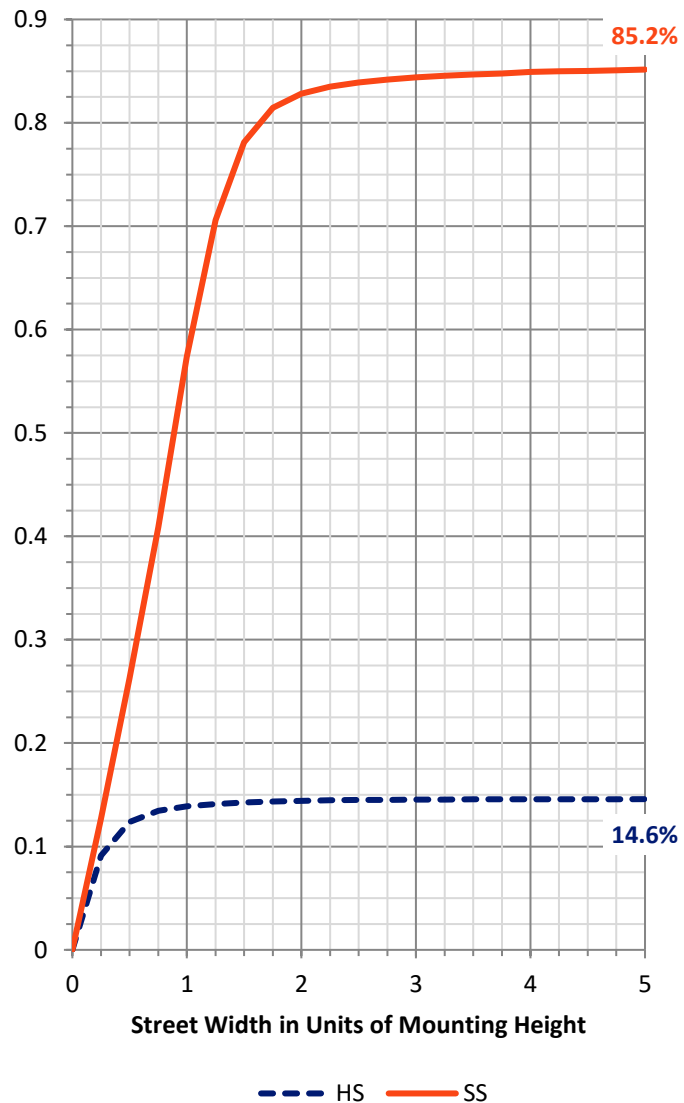
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1499.6	0.0	1499.6
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	8702.2	0.0	8702.2
	% Fixture	85.3	0.0	85.3
Total	Lumens	10201.8	0.0	10201.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.6	1.2
10°-20°	329.2	3.2
20°-30°	573.1	5.6
30°-40°	1033.0	10.1
40°-50°	2048.8	20.1
50°-60°	2790.9	27.4
60°-70°	2227.6	21.8
70°-80°	1008.1	9.9
80°-90°	72.5	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°	10201.8	100.0
0°-180°	10201.8	100.0

Coefficient of Utilization



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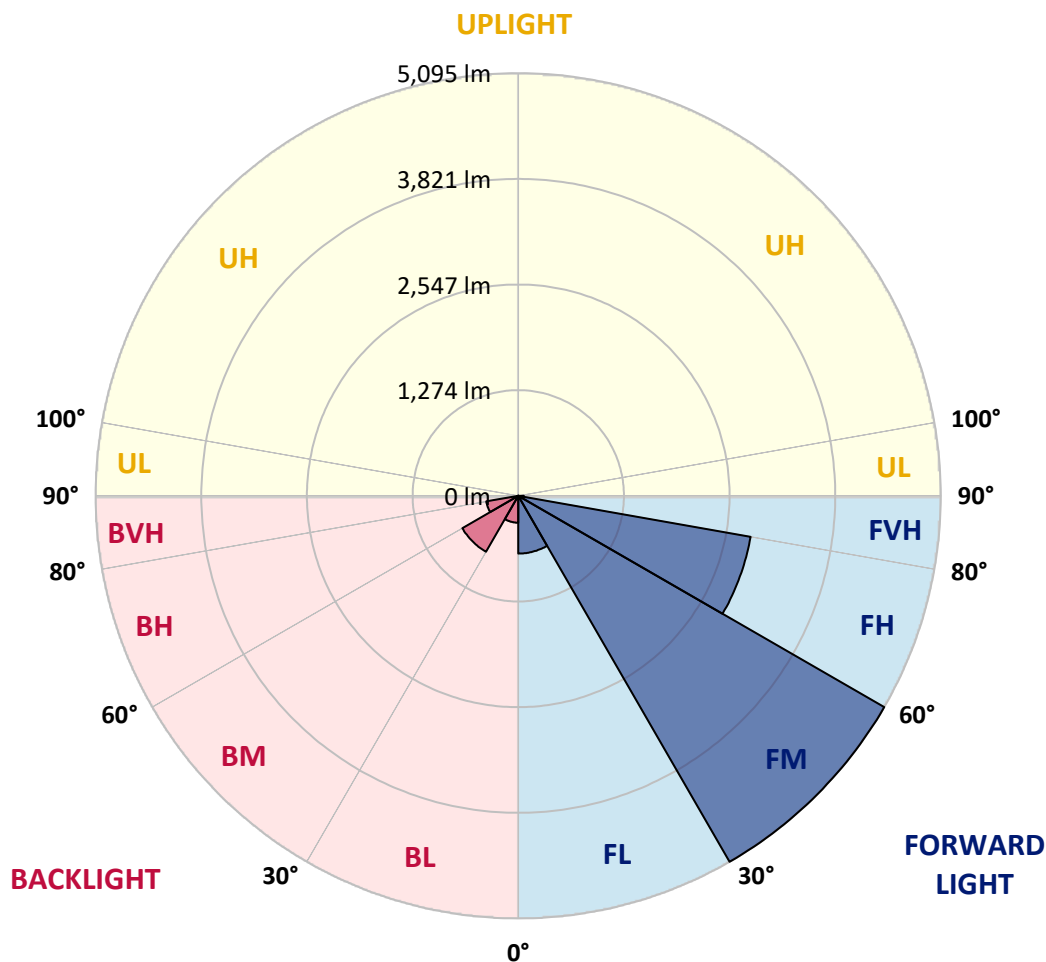
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	696.4	6.8			
FM	(30°-60°)	5094.5	49.9			
FH	(60°-80°)	2844.2	27.9			G2/5000
FVH	(80°-90°)	67.1	0.7			G1/100
BL	(0°-30°)	324.5	3.2	B1/500		
BM	(30°-60°)	778.2	7.6	B1/1000		
BH	(60°-80°)	391.5	3.8	B1/500		G1/500
BVH	(80°-90°)	5.4	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°	1259.1	1259.1	1259.1	1259.1	1259.1	1259.1	1259.1	1259.1	1259.1	1259.1	1259.1
2.5°	1288.5	1285.0	1290.0	1287.9	1286.5	1283.7	1282.3	1280.8	1278.1	1275.9	1267.5
5°	1292.1	1290.0	1294.9	1299.1	1303.3	1307.5	1309.6	1312.4	1309.6	1304.0	1295.6
7.5°	1262.6	1261.2	1271.7	1284.3	1303.3	1319.5	1337.0	1346.8	1347.6	1345.4	1336.3
10°	1260.5	1257.0	1267.5	1283.0	1307.5	1336.3	1367.1	1388.3	1391.0	1400.1	1390.3
12.5°	1293.4	1290.0	1304.7	1321.5	1346.8	1377.0	1414.9	1444.4	1448.6	1461.2	1454.2
15°	1348.9	1344.0	1360.9	1382.6	1414.9	1449.2	1489.3	1516.0	1519.5	1534.9	1522.3
17.5°	1413.5	1408.6	1428.2	1451.4	1486.5	1533.5	1579.8	1609.4	1613.6	1623.4	1600.2
20°	1496.3	1490.0	1505.4	1526.5	1563.7	1619.8	1675.3	1717.4	1716.7	1716.7	1678.8
22.5°	1592.4	1582.6	1596.0	1612.8	1647.9	1716.0	1789.6	1839.6	1839.6	1819.9	1757.4
25°	1695.7	1685.8	1700.6	1716.0	1746.9	1824.1	1910.4	1972.2	1975.0	1941.2	1841.6
27.5°	1824.8	1812.1	1823.4	1841.6	1859.9	1938.5	2041.0	2112.5	2114.0	2062.0	1921.7
30°	2073.3	2037.4	2002.3	1982.7	1991.2	2069.1	2178.5	2257.8	2264.8	2193.3	2008.7
32.5°	2528.1	2521.0	2397.5	2236.0	2151.9	2209.4	2332.2	2427.6	2431.9	2340.0	2121.6
35°	3234.8	3226.4	3027.7	2720.4	2446.0	2397.5	2518.9	2631.9	2629.1	2525.2	2268.3
37.5°	4078.4	4070.7	3808.9	3397.6	2953.3	2681.7	2759.6	2878.2	2895.8	2759.6	2457.8
40°	4799.2	4770.3	4604.8	4208.2	3627.1	3153.3	3102.2	3180.8	3199.0	3037.6	2698.5
42.5°	5345.2	5320.7	5236.4	4988.7	4442.7	3851.0	3505.7	3535.8	3556.2	3362.5	2975.1
45°	5628.1	5622.4	5656.2	5633.0	5273.6	4707.2	4082.6	3957.0	3964.7	3722.6	3288.8
47.5°	5668.0	5665.3	5818.9	6036.5	5988.0	5673.0	4823.0	4481.9	4454.5	4128.9	3629.9
50°	5432.2	5426.7	5721.3	6129.2	6465.3	6484.3	5663.8	5073.5	5013.3	4549.4	3985.7
52.5°	4679.1	4677.8	5162.0	5840.7	6633.1	7194.6	6494.8	5723.5	5622.4	4994.3	4361.9
55°	3600.4	3626.3	4181.6	4983.8	6327.1	7536.3	7240.9	6445.0	6289.9	5442.0	4708.6
57.5°	2550.5	2588.3	3137.2	3851.6	5378.2	7334.2	7745.5	7167.8	7000.9	5888.4	5060.2
60°	1370.0	1403.6	1953.2	2805.9	4001.2	6580.4	8011.5	7795.3	7637.4	6312.4	5377.5
62.5°	816.2	827.5	1054.8	1811.5	2706.3	5027.3	7898.4	8273.3	8143.4	6668.1	5653.3
65°	586.0	588.1	702.5	1106.1	1643.0	3054.4	7106.1	8502.1	8462.1	6936.3	5857.6
67.5°	493.4	492.0	539.7	734.8	1119.4	1530.0	5446.2	8178.5	8348.3	7106.1	5973.4
70°	423.2	425.3	481.4	538.3	841.5	866.0	2707.7	7120.9	7483.0	7151.0	5966.3
72.5°	315.1	322.2	374.1	490.6	635.2	595.8	934.8	5280.0	5934.7	6737.6	5656.8
75°	222.5	226.0	263.2	412.7	473.8	433.8	477.2	2729.5	3568.8	5165.5	4630.0
77.5°	171.3	177.5	199.4	288.4	466.7	304.6	291.9	944.6	1451.4	3120.4	3174.4
80°	92.7	103.8	143.9	208.5	327.8	215.5	144.6	376.2	492.0	1459.1	1224.1
82.5°	47.8	53.3	100.3	150.2	186.7	188.1	71.5	156.5	202.8	450.6	167.7
85°	19.0	23.2	67.3	82.8	96.1	92.7	32.3	63.1	73.0	124.9	51.2
87.5°	4.2	7.0	24.6	19.0	18.2	19.7	7.7	14.8	14.0	14.8	9.1
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°	1259.1	1259.1	1259.1	1259.1	1259.1	1259.1	1259.1	1259.1	1259.1	1259.1	1259.1
2.5°	1266.8	1264.0	1256.2	1247.8	1238.0	1232.5	1228.9	1228.3	1223.3	1219.8	1223.3
5°	1287.9	1285.0	1270.3	1252.8	1233.8	1219.1	1205.1	1192.4	1174.1	1170.7	1169.2
7.5°	1329.9	1322.2	1298.4	1274.6	1238.7	1196.0	1144.0	1084.3	1031.0	1014.9	1007.2
10°	1381.9	1371.3	1341.2	1299.1	1219.8	1103.3	977.6	861.2	768.5	742.5	732.7
12.5°	1440.8	1431.7	1391.7	1313.8	1140.5	929.3	737.0	592.3	502.6	480.0	473.8
15°	1511.1	1497.7	1442.3	1291.4	998.8	706.0	506.0	420.4	388.2	383.9	379.7
17.5°	1585.5	1563.7	1487.2	1210.6	807.8	501.8	390.9	366.3	352.3	348.1	346.0
20°	1653.5	1625.4	1513.8	1088.6	603.6	390.9	350.2	334.0	321.4	316.5	313.8
22.5°	1721.6	1681.6	1513.8	922.2	452.6	346.8	321.4	306.7	291.9	285.7	282.2
25°	1792.5	1739.1	1487.2	737.0	364.3	318.0	294.1	277.9	265.3	257.6	254.8
27.5°	1861.3	1787.6	1426.2	561.5	324.2	292.6	268.8	253.4	241.4	235.9	235.9
30°	1926.6	1835.3	1340.5	426.0	298.3	268.1	245.7	232.3	220.4	214.7	215.5
32.5°	2014.9	1895.6	1249.3	349.5	275.8	245.0	224.6	212.0	201.4	197.2	197.2
35°	2137.8	1984.8	1170.7	343.2	256.9	226.0	205.6	193.7	183.2	179.7	179.7
37.5°	2311.9	2128.7	1129.2	385.3	241.4	209.1	190.2	177.5	167.7	164.9	164.2
40°	2526.6	2323.8	1151.7	427.4	230.9	194.4	176.2	163.5	155.1	151.6	150.9
42.5°	2781.3	2564.5	1275.9	459.7	223.9	181.7	162.9	148.8	143.2	141.8	141.8
45°	3074.1	2829.1	1466.2	494.0	212.7	169.8	149.4	139.0	134.8	134.1	133.4
47.5°	3406.7	3119.7	1686.5	536.9	201.4	158.6	139.0	131.9	128.4	127.0	127.0
50°	3736.6	3412.3	1913.2	560.8	192.3	148.1	130.6	124.9	122.1	121.5	121.5
52.5°	4081.9	3713.5	2096.4	538.3	184.6	139.7	123.5	119.3	116.5	115.8	115.8
55°	4411.1	3957.0	2128.0	456.9	169.1	131.2	115.8	113.7	110.2	110.2	109.5
57.5°	4694.6	4079.1	1904.8	335.5	153.8	118.6	108.0	106.0	103.2	102.5	101.8
60°	4955.0	4044.0	1470.4	226.0	136.8	106.0	98.3	96.9	94.1	90.5	89.8
62.5°	5101.6	3889.6	1005.7	147.4	120.0	92.7	87.0	86.3	80.1	73.0	71.5
65°	5157.1	3572.3	627.4	107.4	100.3	79.3	75.1	73.7	64.6	56.9	56.2
67.5°	5108.7	3050.2	316.5	85.0	79.3	66.0	61.8	61.8	55.5	48.4	47.8
70°	4915.0	2286.6	133.4	68.1	61.1	50.5	50.5	53.3	47.0	39.3	38.6
72.5°	4494.5	1538.4	70.9	52.0	45.6	35.8	41.4	43.6	37.2	29.5	29.5
75°	3573.0	938.4	49.1	38.6	28.8	25.2	31.6	33.0	25.2	19.7	19.0
77.5°	2443.8	539.0	33.0	24.6	18.2	14.8	21.7	20.4	13.3	9.1	9.8
80°	1073.1	224.6	19.0	11.3	7.0	5.6	7.7	5.6	4.2	2.8	2.8
82.5°	125.7	52.7	7.0	4.2	2.8	1.4	0.7	0.0	0.0	0.0	0.0
85°	25.9	6.4	3.5	1.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.9	1.4	0.7	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)