

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: P963637

Luminaire Tested: **NAV-SB3A-827-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963637
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-827-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

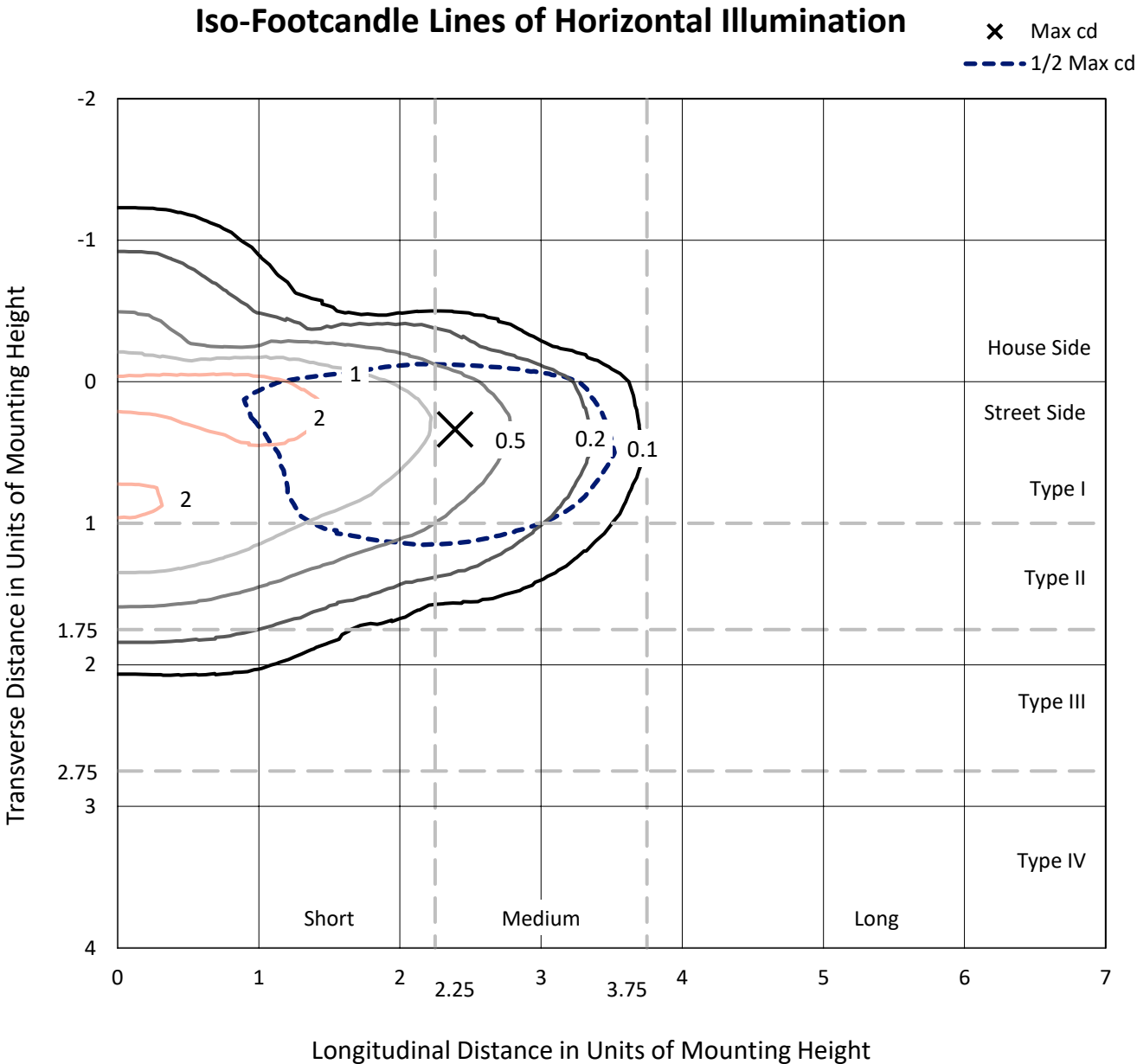
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8759.6 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 84.7
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



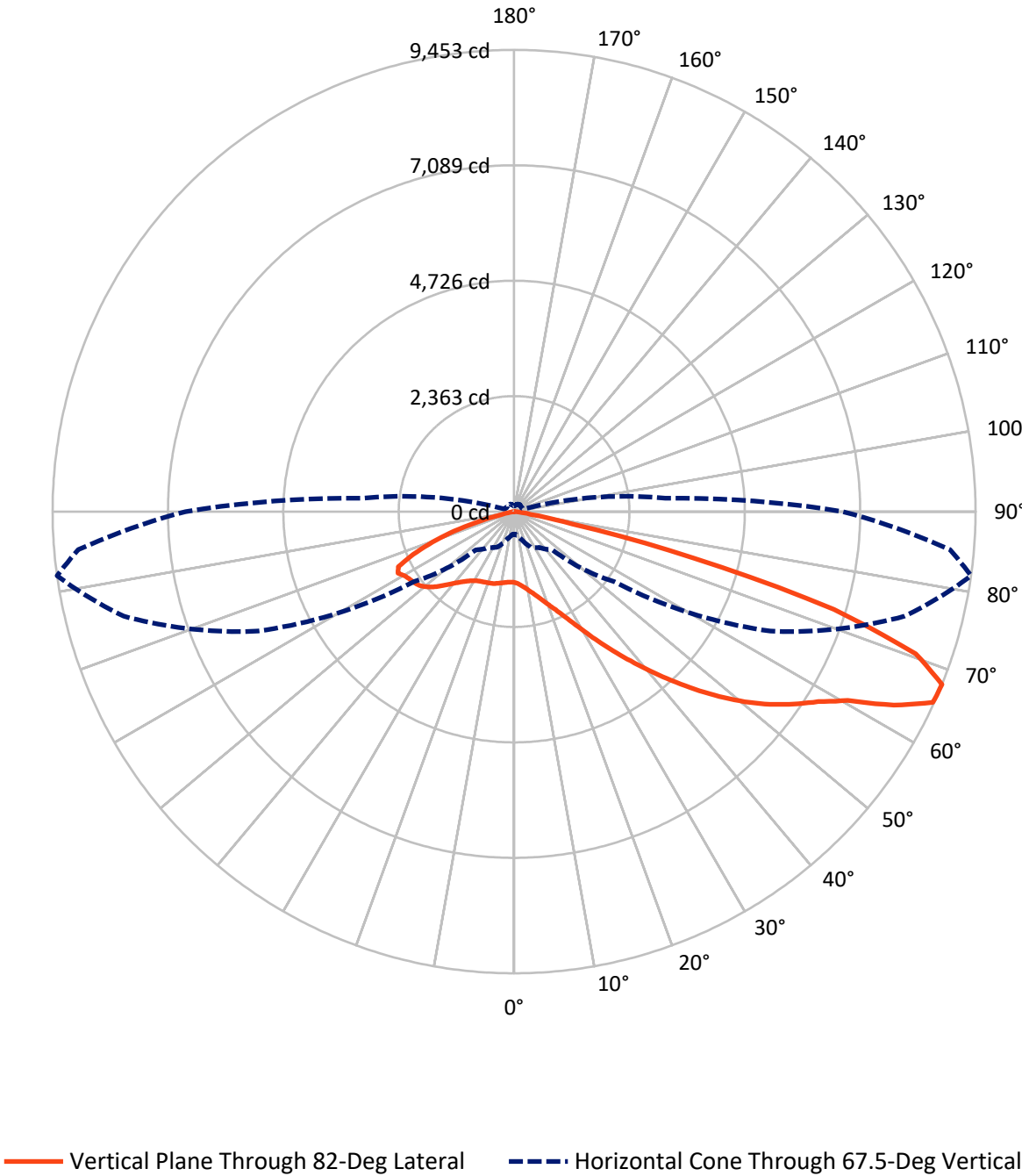
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Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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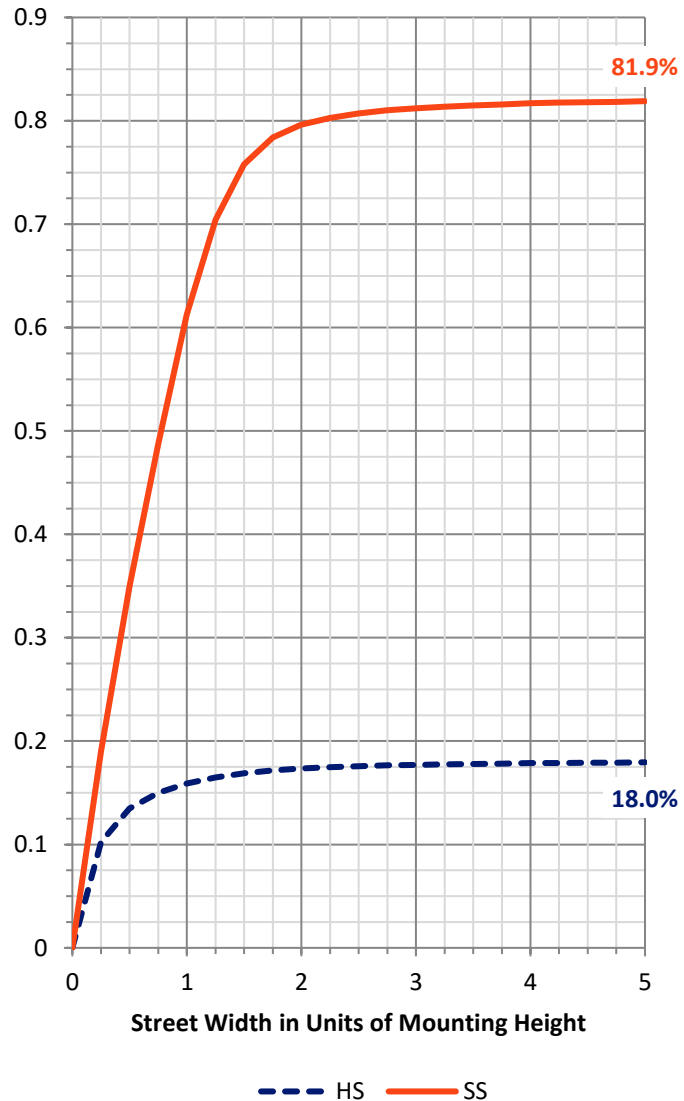
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1586.7	0.0	1586.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	7172.9	0.0	7172.9
	% Fixture	81.9	0.0	81.9
Total	Lumens	8759.6	0.0	8759.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.3	1.5
10°-20°	336.0	3.8
20°-30°	538.1	6.1
30°-40°	951.6	10.9
40°-50°	1667.2	19.0
50°-60°	2223.6	25.4
60°-70°	2070.1	23.6
70°-80°	794.5	9.1
80°-90°	49.3	0.6
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°	8759.6	100.0
0°-180°	8759.6	100.0

Coefficient of Utilization



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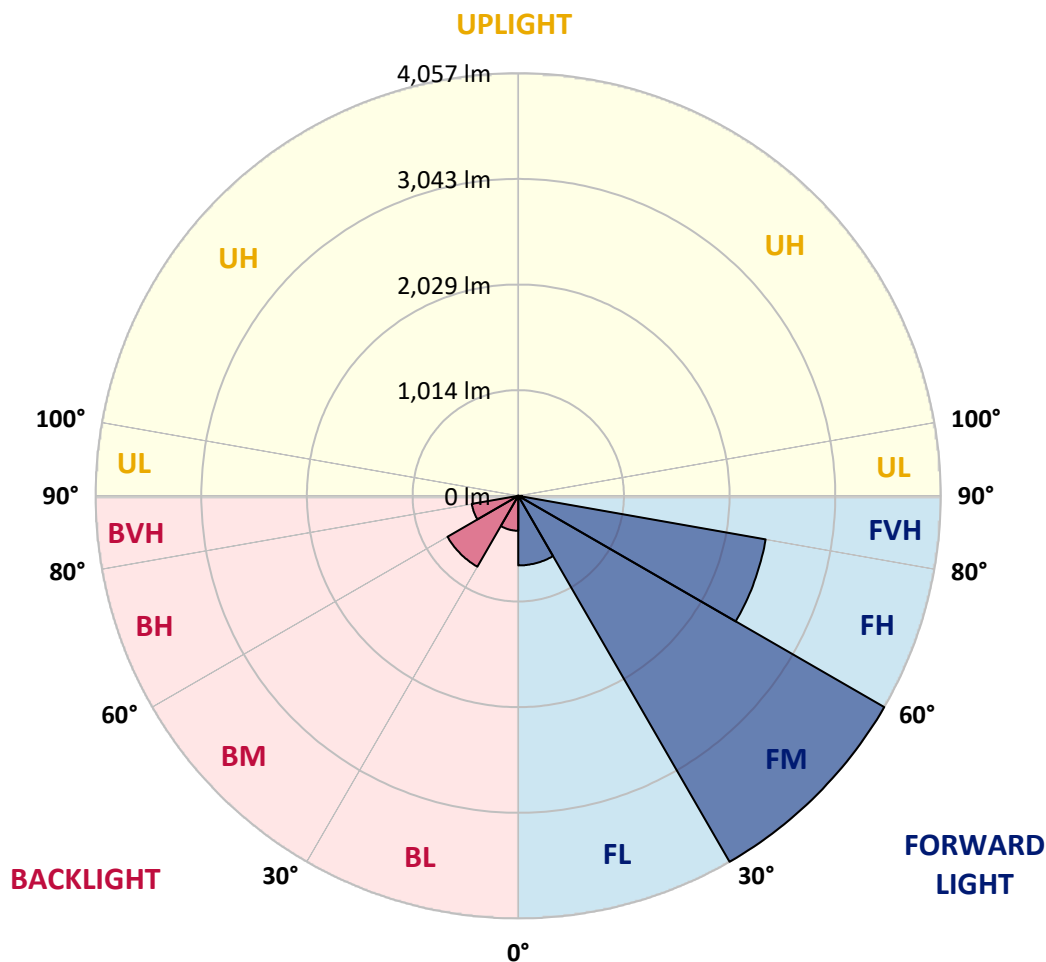
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	668.3	7.6			
FM	(30°-60°)	4057.1	46.3			
FH	(60°-80°)	2411.7	27.5			G2/5000
FVH	(80°-90°)	35.9	0.4			G1/100
BL	(0°-30°)	335.1	3.8	B1/500		
BM	(30°-60°)	785.3	9.0	B1/1000		
BH	(60°-80°)	452.9	5.2	B1/500		G1/500
BVH	(80°-90°)	13.5	0.2			G1/100
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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1451.2	1451.2	1451.2	1451.2	1451.2	1451.2	1451.2	1451.2	1451.2	1451.2	1451.2
2.5°	1533.8	1542.6	1537.6	1535.0	1530.6	1524.4	1519.3	1503.6	1487.2	1476.4	1472.6
5°	1564.7	1573.5	1572.9	1575.4	1578.6	1580.4	1579.2	1561.6	1538.2	1519.9	1509.2
7.5°	1538.2	1548.3	1556.5	1569.1	1591.2	1614.5	1625.9	1622.1	1598.1	1572.9	1559.6
10°	1463.2	1473.8	1493.4	1523.0	1569.8	1620.2	1662.4	1682.0	1666.9	1639.1	1620.8
12.5°	1325.6	1336.4	1374.8	1439.2	1517.4	1605.0	1685.8	1738.1	1741.9	1714.2	1692.7
15°	1171.2	1181.9	1222.8	1303.6	1422.8	1563.4	1698.4	1797.4	1830.9	1806.9	1781.0
17.5°	1075.3	1084.8	1115.6	1180.6	1304.8	1480.2	1694.0	1860.5	1936.8	1917.9	1886.9
20°	1046.3	1054.5	1069.0	1114.4	1217.8	1393.8	1665.0	1919.7	2050.9	2040.3	2005.5
22.5°	1077.2	1084.8	1089.2	1109.4	1174.3	1337.0	1628.4	1980.3	2183.4	2184.7	2142.4
25°	1148.4	1156.0	1151.0	1163.6	1192.0	1319.4	1614.5	2051.5	2349.9	2363.8	2315.8
27.5°	1265.8	1266.4	1254.4	1253.8	1258.2	1345.8	1629.0	2127.9	2559.9	2585.8	2526.5
30°	1501.0	1491.6	1445.5	1395.6	1373.0	1425.4	1669.4	2218.1	2807.8	2853.8	2779.4
32.5°	1863.7	1849.7	1765.3	1646.0	1526.2	1553.4	1741.9	2320.9	3077.7	3160.9	3070.1
35°	2257.2	2253.4	2165.1	1987.9	1778.5	1735.6	1859.9	2455.8	3372.2	3504.7	3396.8
37.5°	2623.0	2621.0	2570.6	2361.9	2107.1	1989.7	2049.1	2632.4	3687.5	3879.3	3751.9
40°	2957.2	2962.9	2912.4	2725.8	2469.1	2315.8	2306.4	2850.6	4038.2	4287.3	4136.0
42.5°	3246.1	3252.4	3201.3	3063.2	2826.6	2676.6	2622.4	3118.0	4380.6	4725.7	4546.5
45°	3442.3	3481.3	3473.7	3363.3	3193.7	3038.0	3002.0	3453.5	4771.1	5190.4	4980.4
47.5°	3497.7	3533.7	3590.4	3605.5	3502.1	3348.9	3391.7	3857.8	5165.8	5655.8	5416.8
50°	3360.9	3394.3	3512.3	3669.3	3741.1	3693.9	3770.8	4291.1	5570.1	6120.1	5845.1
52.5°	3090.9	3125.0	3273.8	3522.3	3815.6	3964.4	4151.0	4718.1	5961.7	6559.6	6250.6
55°	2700.6	2736.4	2927.6	3208.9	3673.7	4076.0	4468.3	5144.4	6320.6	6955.0	6616.4
57.5°	2169.5	2196.0	2394.7	2788.2	3316.7	3965.0	4702.3	5609.8	6658.6	7343.5	6979.0
60°	1414.0	1437.3	1668.1	2107.1	2725.2	3594.2	4748.9	6128.9	7107.7	7848.7	7467.8
62.5°	940.3	956.1	1093.0	1415.2	1919.1	2882.2	4475.9	6543.2	7766.1	8727.9	8306.0
65°	645.1	660.9	797.8	1022.3	1239.9	1906.5	3690.7	6488.4	8362.7	9426.0	8927.1
67.5°	460.4	473.7	589.7	801.6	897.5	1107.4	2501.9	5787.0	8277.0	9452.6	8960.6
70°	329.8	337.4	433.3	624.3	713.3	665.3	1391.2	4426.1	7247.1	8728.5	8278.2
72.5°	230.8	233.4	300.8	475.5	574.5	485.6	662.3	2950.9	5481.2	6851.0	6417.7
75°	156.4	159.6	202.4	348.8	461.0	370.8	350.7	1582.4	3217.7	3792.2	3399.3
77.5°	95.8	97.2	130.6	238.4	345.0	282.6	225.8	670.5	1245.0	1222.2	1041.9
80°	54.2	54.2	83.2	148.2	235.2	182.2	158.3	285.1	394.2	346.2	305.2
82.5°	30.2	30.9	60.6	92.0	155.8	107.8	87.0	131.8	170.3	150.8	131.2
85°	12.6	13.8	37.2	43.6	74.4	53.6	35.4	55.5	63.0	56.2	41.0
87.5°	1.2	1.8	11.4	8.2	8.8	10.8	5.0	10.8	8.8	8.8	6.4
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°	1451.2	1451.2	1451.2	1451.2	1451.2	1451.2	1451.2	1451.2	1451.2	1451.2	1451.2
2.5°	1460.6	1451.2	1427.2	1399.4	1362.8	1345.2	1321.2	1304.8	1291.0	1292.2	1279.6
5°	1489.0	1465.0	1411.4	1344.6	1261.4	1202.0	1139.0	1095.5	1060.2	1052.6	1035.6
7.5°	1528.1	1490.2	1396.4	1275.8	1135.2	1028.6	933.4	872.2	828.7	814.9	800.9
10°	1578.6	1523.7	1376.8	1189.4	987.0	851.4	749.3	701.3	671.7	661.5	654.1
12.5°	1637.2	1562.2	1350.9	1084.1	834.4	703.9	638.9	614.9	605.5	602.3	600.4
15°	1711.0	1610.1	1311.8	959.3	705.1	613.7	585.9	582.7	584.0	582.7	582.1
17.5°	1798.7	1662.4	1248.1	830.6	618.1	567.6	557.5	560.1	563.2	562.5	561.3
20°	1894.5	1714.2	1166.8	716.5	558.7	534.8	529.1	531.7	534.2	532.9	532.3
22.5°	2003.7	1769.7	1076.6	627.5	519.1	504.5	498.3	498.9	498.9	496.3	495.1
25°	2134.2	1830.9	982.0	564.5	488.7	477.4	469.9	467.3	463.5	456.0	454.7
27.5°	2290.0	1895.8	891.1	520.3	464.8	454.1	445.3	438.9	429.5	416.9	415.6
30°	2465.3	1974.7	814.2	492.5	445.9	435.2	425.1	415.6	401.7	386.0	384.7
32.5°	2671.6	2059.1	758.1	474.3	428.9	417.5	405.5	394.2	379.0	363.3	363.9
35°	2917.5	2161.3	725.3	461.7	415.6	400.5	387.2	374.6	363.3	349.4	348.1
37.5°	3184.3	2269.8	715.1	455.3	406.8	383.5	368.3	359.5	358.2	350.0	349.4
40°	3476.3	2398.4	722.7	451.5	397.3	367.1	350.7	348.8	351.9	337.4	338.0
42.5°	3785.3	2551.0	735.3	447.1	384.1	350.7	334.9	334.9	332.4	312.2	312.2
45°	4119.6	2727.0	747.9	436.4	368.3	334.3	322.3	317.9	307.1	287.6	287.0
47.5°	4456.3	2906.2	757.5	416.9	349.4	320.4	309.7	299.6	283.8	266.2	265.5
50°	4776.1	3067.0	747.3	387.9	328.0	307.1	295.8	281.9	264.9	252.9	251.0
52.5°	5061.8	3206.3	704.5	353.8	305.2	293.3	283.2	268.7	254.8	242.2	240.9
55°	5310.2	3319.3	628.7	321.6	285.1	281.3	271.2	252.9	234.0	223.2	222.0
57.5°	5548.6	3405.0	534.2	295.2	266.8	268.0	252.9	236.5	218.8	207.5	206.2
60°	5865.9	3519.7	438.3	270.6	247.2	251.0	234.6	222.6	200.6	186.0	184.2
62.5°	6372.9	3698.3	348.1	240.3	224.5	225.8	218.8	204.4	177.8	160.8	159.6
65°	6775.4	3632.7	274.4	207.5	198.6	200.6	200.6	184.8	156.4	136.8	135.0
67.5°	6729.9	3110.5	218.8	175.4	174.0	175.4	179.8	166.5	138.8	123.0	120.4
70°	6199.5	2474.1	175.4	145.7	151.4	148.2	160.8	152.0	124.8	109.1	107.2
72.5°	5058.6	1782.3	133.7	120.4	116.0	121.1	145.0	136.8	104.0	86.4	84.5
75°	2956.0	951.1	99.6	95.2	83.8	100.9	128.6	116.6	79.4	63.7	61.8
77.5°	962.4	331.7	73.2	70.0	62.4	81.4	109.8	98.4	65.0	50.4	48.6
80°	258.0	100.2	49.8	46.0	40.4	60.6	87.0	78.2	46.6	32.8	32.2
82.5°	103.4	42.2	29.0	25.8	22.0	41.6	68.8	63.0	34.6	20.8	20.8
85°	33.4	13.8	10.8	8.2	10.0	25.8	41.0	42.8	24.6	10.8	8.2
87.5°	4.4	1.8	1.8	2.6	1.8	4.4	12.6	12.0	7.0	1.2	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)