

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: P963668

Luminaire Tested: **NAV-SB3A-830-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963668
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-830-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

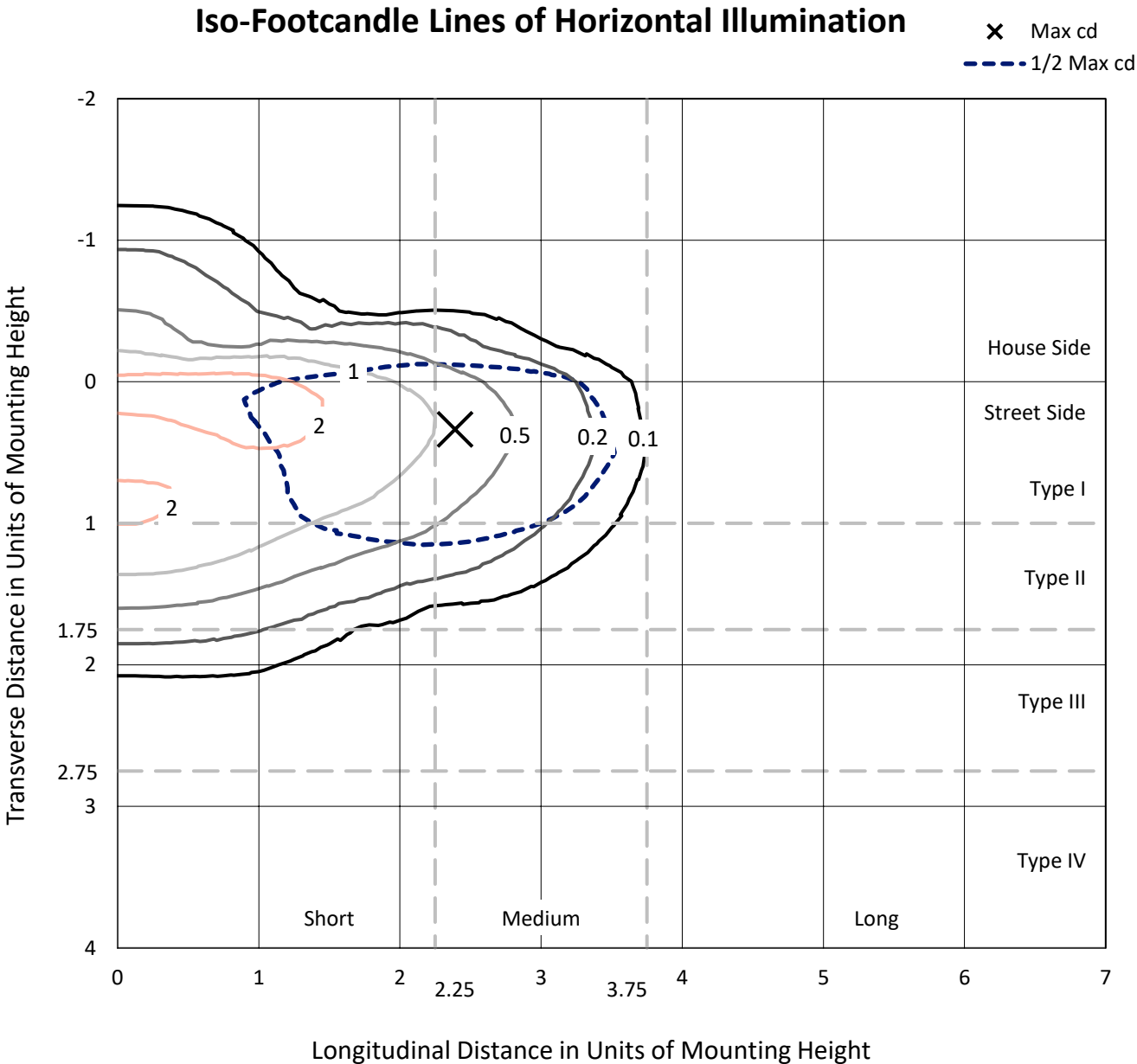
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9051.8 lumens
Efficiency: N/A
Efficacy: 106.9 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



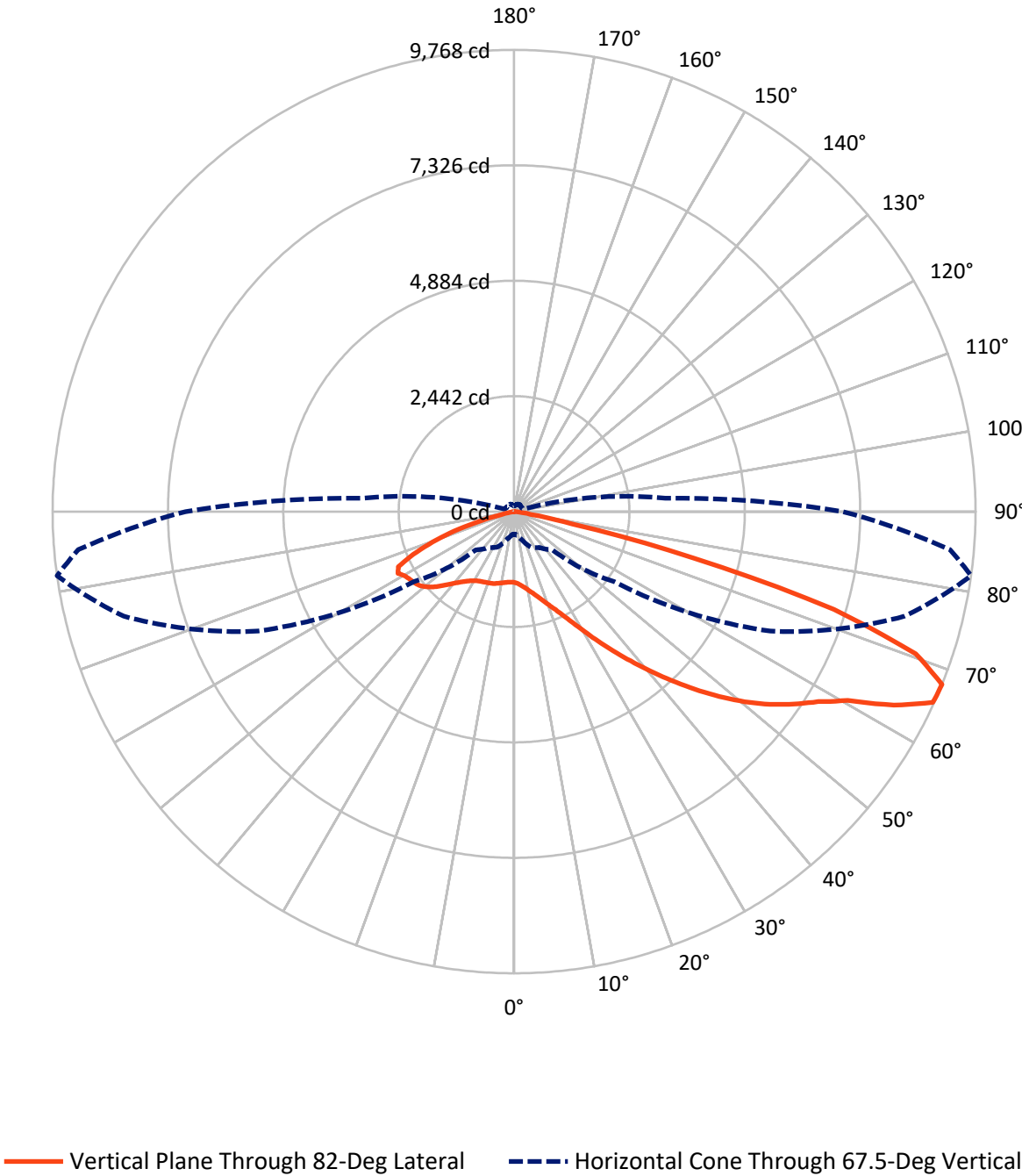
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Based on 25 foot mounting height. Maximum calculated value = 3.2 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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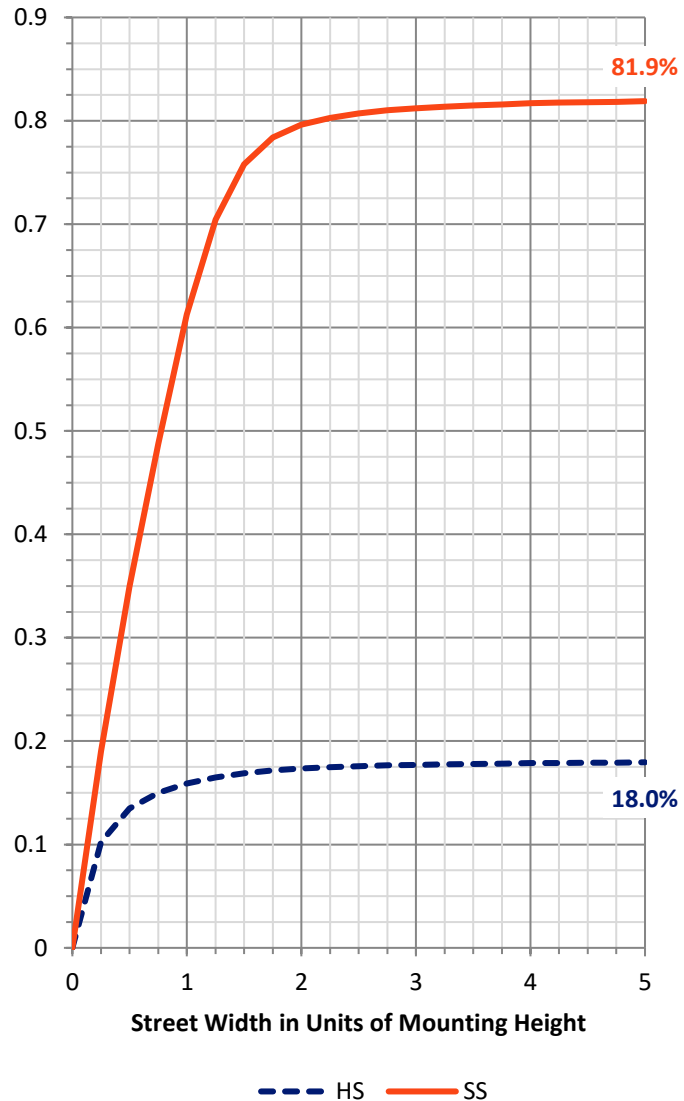
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1639.7	0.0	1639.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	7412.1	0.0	7412.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	9051.8	0.0	9051.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.6	1.5
10°-20°	347.2	3.8
20°-30°	556.1	6.1
30°-40°	983.3	10.9
40°-50°	1722.8	19.0
50°-60°	2297.8	25.4
60°-70°	2139.1	23.6
70°-80°	821.0	9.1
80°-90°	51.0	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°	9051.8	100.0
0°-180°	9051.8	100.0

Coefficient of Utilization



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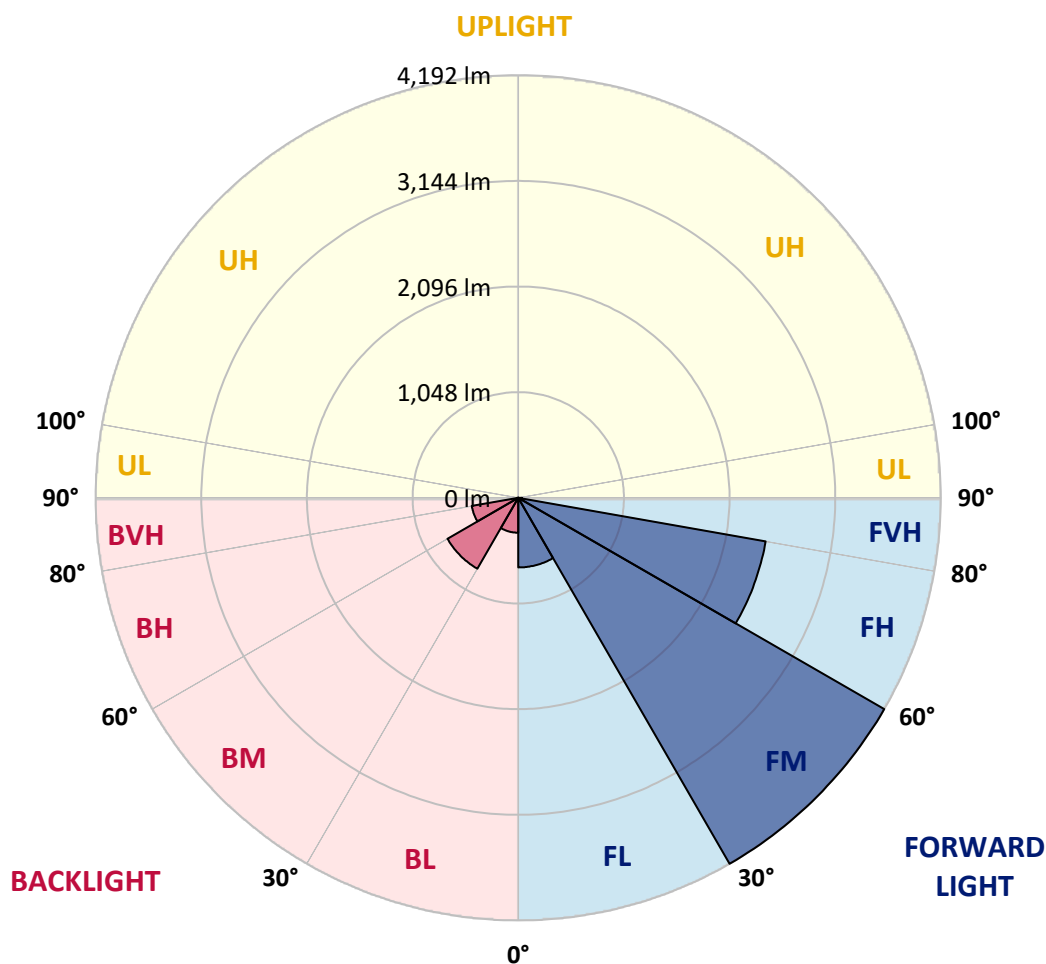
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	690.5	7.6			
FM	(30°-60°)	4192.4	46.3			
FH	(60°-80°)	2492.1	27.5			G2/5000
FVH	(80°-90°)	37.1	0.4			G1/100
BL	(0°-30°)	346.3	3.8	B1/500		
BM	(30°-60°)	811.5	9.0	B1/1000		
BH	(60°-80°)	468.0	5.2	B1/500		G1/500
BVH	(80°-90°)	13.9	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°	1499.6	1499.6	1499.6	1499.6	1499.6	1499.6	1499.6	1499.6	1499.6	1499.6	1499.6
2.5°	1585.0	1594.1	1588.9	1586.3	1581.7	1575.2	1570.0	1553.7	1536.7	1525.6	1521.7
5°	1616.8	1626.0	1625.3	1628.0	1631.2	1633.1	1631.9	1613.7	1589.5	1570.6	1559.5
7.5°	1589.5	1599.9	1608.4	1621.4	1644.2	1668.4	1680.1	1676.2	1651.4	1625.3	1611.7
10°	1512.0	1523.0	1543.2	1573.9	1622.1	1674.2	1717.9	1738.1	1722.4	1693.8	1674.8
12.5°	1369.9	1381.0	1420.8	1487.2	1568.0	1658.6	1742.0	1796.1	1800.0	1771.3	1749.2
15°	1210.2	1221.3	1263.6	1347.1	1470.3	1615.6	1755.0	1857.4	1891.9	1867.1	1840.4
17.5°	1111.2	1120.9	1152.8	1220.0	1348.4	1529.5	1750.5	1922.5	2001.4	1981.8	1949.9
20°	1081.2	1089.7	1104.6	1151.6	1258.4	1440.2	1720.5	1983.8	2119.4	2108.2	2072.4
22.5°	1113.1	1120.9	1125.4	1146.4	1213.5	1381.6	1682.7	2046.3	2256.2	2257.5	2213.8
25°	1186.7	1194.5	1189.4	1202.4	1231.7	1363.4	1668.4	2120.0	2428.2	2442.6	2393.1
27.5°	1308.0	1308.6	1296.2	1295.6	1300.1	1390.7	1683.4	2198.8	2645.3	2672.0	2610.8
30°	1551.0	1541.3	1493.7	1442.2	1418.8	1472.8	1725.1	2292.0	2901.4	2948.9	2872.0
32.5°	1925.8	1911.4	1824.1	1701.0	1577.2	1605.1	1800.0	2398.3	3180.4	3266.4	3172.5
35°	2332.5	2328.5	2237.3	2054.2	1837.8	1793.4	1921.9	2537.7	3484.7	3621.5	3510.1
37.5°	2710.4	2708.5	2656.4	2440.6	2177.3	2056.1	2117.3	2720.2	3810.5	4008.7	3877.0
40°	3055.8	3061.7	3009.6	2816.7	2551.4	2393.1	2383.3	2945.7	4172.9	4430.3	4273.8
42.5°	3354.3	3360.9	3308.1	3165.3	2920.9	2765.9	2709.8	3222.0	4526.7	4883.2	4698.2
45°	3557.0	3597.4	3589.6	3475.6	3300.2	3139.3	3102.2	3568.7	4930.1	5363.5	5146.5
47.5°	3614.4	3651.5	3710.2	3725.8	3619.0	3460.5	3504.9	3986.4	5338.1	5844.4	5597.5
50°	3472.9	3507.4	3629.3	3791.6	3865.9	3817.0	3896.5	4434.2	5755.9	6324.1	6040.0
52.5°	3194.0	3229.2	3383.0	3639.8	3942.8	4096.6	4289.5	4875.4	6160.6	6778.4	6459.0
55°	2790.6	2827.8	3025.2	3315.9	3796.2	4211.9	4617.3	5316.0	6531.4	7187.0	6837.1
57.5°	2241.9	2269.2	2474.6	2881.2	3427.3	4097.2	4859.1	5796.9	6880.7	7588.5	7211.8
60°	1461.1	1485.2	1723.7	2177.3	2816.0	3714.1	4907.3	6333.3	7344.7	8110.5	7716.8
62.5°	971.7	988.0	1129.4	1462.5	1983.2	2978.2	4625.1	6761.4	8025.1	9019.0	8582.9
65°	666.7	683.0	824.4	1056.4	1281.2	1970.2	3813.8	6704.7	8641.6	9740.4	9224.9
67.5°	475.7	489.4	609.4	828.3	927.4	1144.4	2585.4	5980.1	8553.0	9767.7	9259.4
70°	340.8	348.7	447.7	645.2	737.1	687.6	1437.7	4573.7	7488.8	9019.6	8554.2
72.5°	238.5	241.1	310.9	491.4	593.7	501.8	684.3	3049.4	5663.9	7079.5	6631.7
75°	161.6	164.9	209.2	360.4	476.4	383.2	362.3	1635.1	3325.0	3918.7	3512.7
77.5°	99.0	100.3	134.9	246.3	356.5	291.9	233.3	692.8	1286.5	1263.0	1076.7
80°	56.1	56.1	86.0	153.1	243.1	188.3	163.6	294.6	407.3	357.8	315.4
82.5°	31.3	32.0	62.5	95.1	160.9	111.4	89.9	136.2	176.0	155.8	135.5
85°	13.0	14.3	38.4	45.0	76.9	55.4	36.5	57.4	65.2	58.0	42.3
87.5°	1.3	1.9	11.7	8.5	9.1	11.1	5.2	11.1	9.1	9.1	6.6
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°	1499.6	1499.6	1499.6	1499.6	1499.6	1499.6	1499.6	1499.6	1499.6	1499.6	1499.6
2.5°	1509.3	1499.6	1474.8	1446.2	1408.4	1390.1	1365.3	1348.4	1334.0	1335.4	1322.4
5°	1538.6	1513.9	1458.5	1389.4	1303.4	1242.2	1177.0	1132.0	1095.5	1087.7	1070.1
7.5°	1579.1	1540.0	1442.9	1318.4	1173.1	1062.9	964.5	901.3	856.4	842.0	827.7
10°	1631.2	1574.5	1422.7	1229.1	1019.9	879.8	774.2	724.7	694.0	683.7	675.8
12.5°	1691.9	1614.3	1395.9	1120.3	862.2	727.3	660.2	635.4	625.7	622.4	620.4
15°	1768.1	1663.8	1355.6	991.3	728.6	634.1	605.5	602.2	603.5	602.2	601.6
17.5°	1858.6	1717.9	1289.8	858.3	638.7	586.5	576.2	578.7	582.0	581.3	580.0
20°	1957.7	1771.3	1205.6	740.4	577.4	552.7	546.7	549.4	552.0	550.7	550.0
22.5°	2070.5	1828.7	1112.4	648.4	536.4	521.3	514.9	515.5	515.5	512.9	511.6
25°	2205.4	1891.9	1014.7	583.2	505.1	493.3	485.5	482.9	479.0	471.2	469.9
27.5°	2366.3	1959.0	920.9	537.6	480.3	469.2	460.1	453.6	443.8	430.8	429.5
30°	2547.5	2040.5	841.3	509.0	460.7	449.7	439.2	429.5	415.1	398.8	397.5
32.5°	2760.6	2127.8	783.3	490.1	443.2	431.4	419.0	407.3	391.7	375.4	376.1
35°	3014.8	2233.4	749.5	477.0	429.5	413.8	400.2	387.1	375.4	361.0	359.8
37.5°	3290.5	2345.5	739.0	470.6	420.4	396.3	380.6	371.5	370.1	361.7	361.0
40°	3592.2	2478.4	746.8	466.6	410.6	379.2	362.3	360.4	363.7	348.7	349.3
42.5°	3911.5	2636.1	759.9	462.1	396.9	362.3	346.0	346.0	343.5	322.6	322.6
45°	4256.9	2817.9	773.0	451.0	380.6	345.4	333.0	328.4	317.3	297.1	296.5
47.5°	4604.9	3003.0	782.7	430.8	361.0	331.1	320.0	309.5	293.3	275.0	274.4
50°	4935.4	3169.2	772.2	400.8	338.9	317.3	305.7	291.3	273.7	261.4	259.4
52.5°	5230.6	3313.3	728.0	365.6	315.4	303.1	292.6	277.7	263.3	250.3	249.0
55°	5487.3	3430.0	649.7	332.4	294.6	290.7	280.2	261.4	241.8	230.7	229.4
57.5°	5733.7	3518.5	552.0	305.0	275.6	277.0	261.4	244.4	226.1	214.4	213.1
60°	6061.5	3637.2	452.9	279.6	255.4	259.4	242.4	230.0	207.3	192.3	190.3
62.5°	6585.5	3821.6	359.8	248.3	232.0	233.3	226.1	211.2	183.8	166.2	164.9
65°	7001.3	3753.9	283.5	214.4	205.3	207.3	207.3	191.0	161.6	141.4	139.5
67.5°	6954.3	3214.2	226.1	181.2	179.9	181.2	185.7	172.1	143.4	127.1	124.4
70°	6406.2	2556.7	181.2	150.6	156.4	153.1	166.2	157.0	129.0	112.7	110.8
72.5°	5227.3	1841.7	138.2	124.4	119.9	125.2	149.9	141.4	107.5	89.3	87.3
75°	3054.5	982.8	103.0	98.4	86.7	104.2	132.9	120.5	82.1	65.8	63.9
77.5°	994.5	342.8	75.6	72.4	64.5	84.0	113.4	101.7	67.1	52.2	50.2
80°	266.5	103.6	51.5	47.6	41.7	62.5	89.9	80.8	48.2	33.9	33.2
82.5°	106.9	43.7	29.9	26.8	22.9	43.0	71.0	65.2	35.9	21.5	21.5
85°	34.5	14.3	11.1	8.5	10.5	26.8	42.3	44.3	25.4	11.1	8.5
87.5°	4.6	1.9	1.9	2.6	1.9	4.6	13.0	12.4	7.2	1.3	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)