

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: P959318

Luminaire Tested: **NAV-SB1A-740-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959318
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-740-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4837 lumens
Efficiency: N/A
Efficacy: 156.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

Input Watts (W): 30.9
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

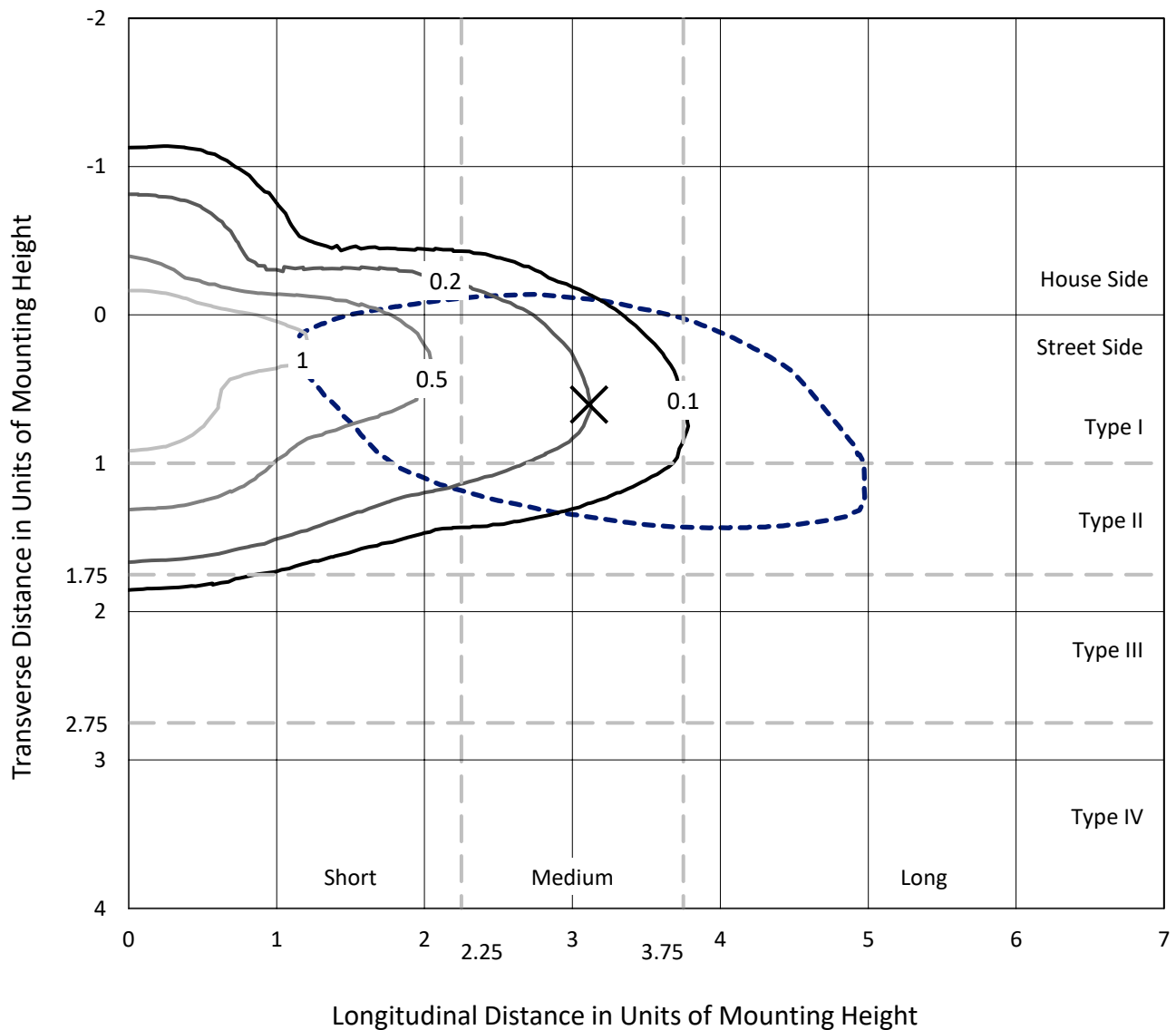


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Iso-Footcandle Lines of Horizontal Illumination

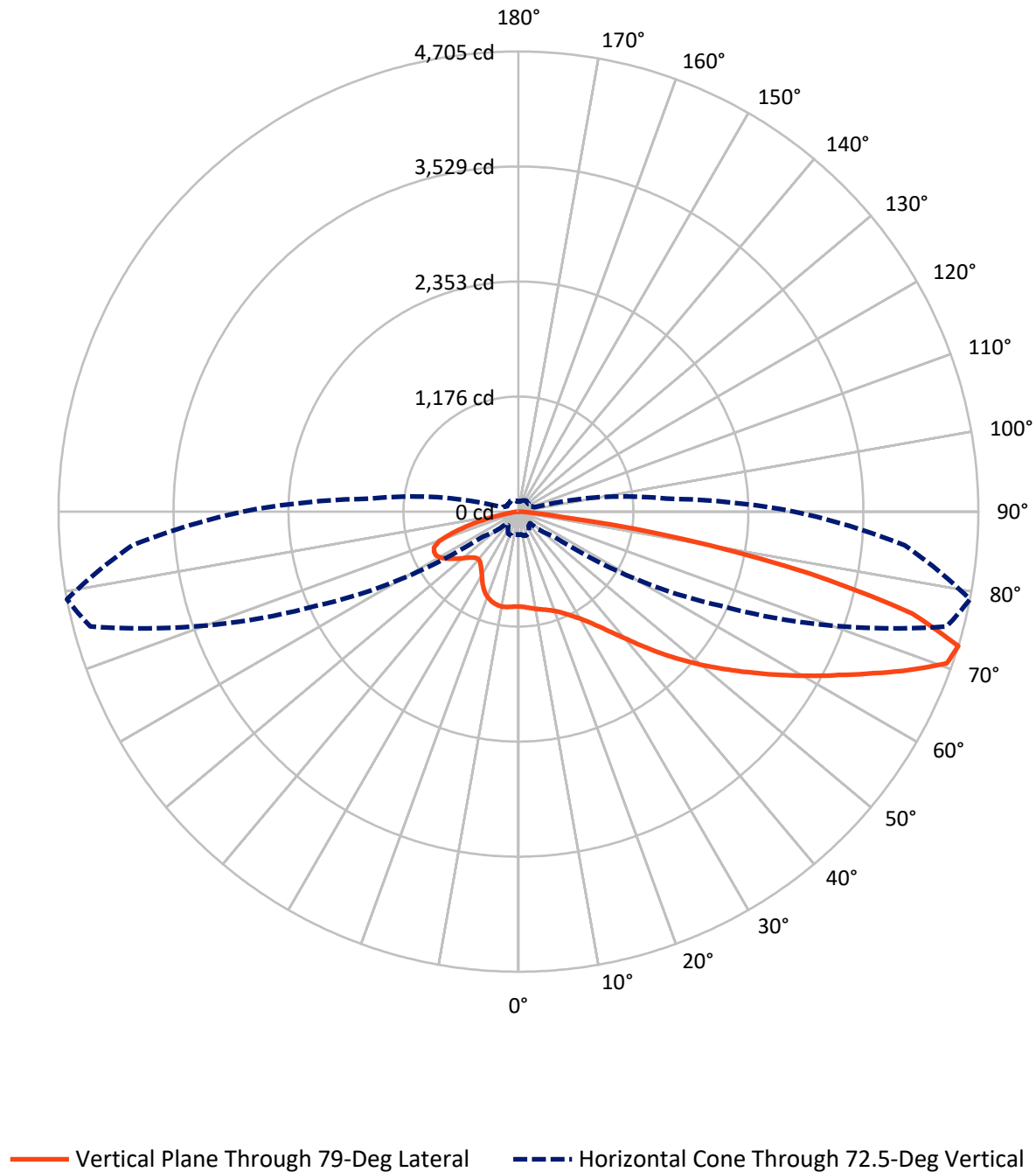
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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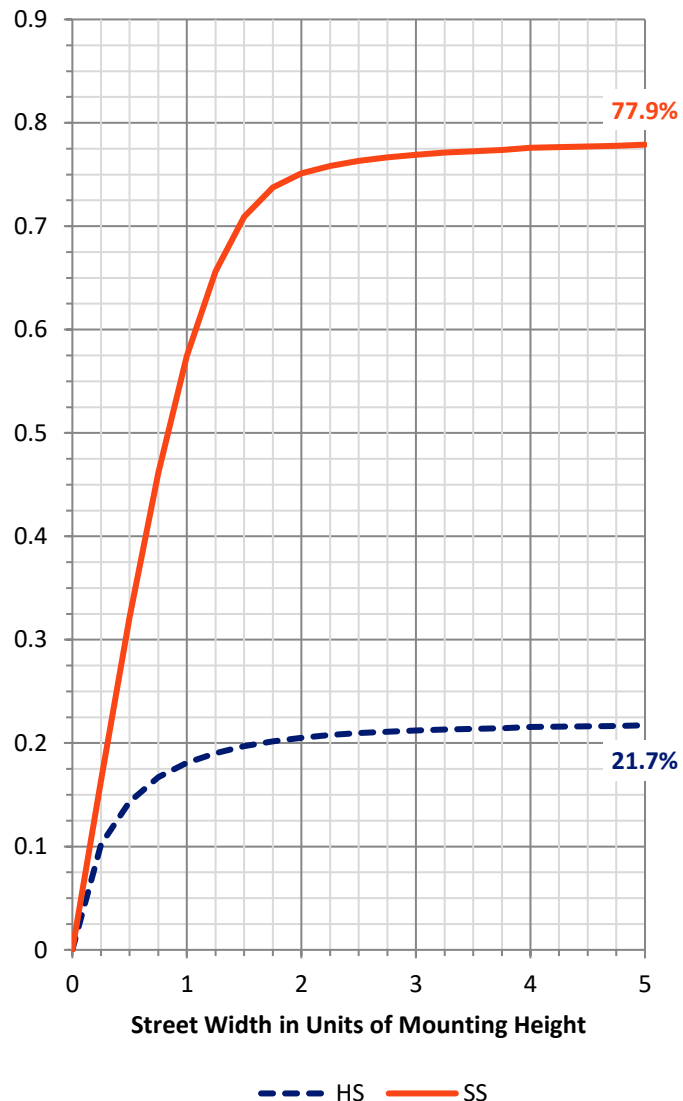
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1064.4	0.0	1064.4
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	3772.6	0.0	3772.6
	% Fixture	78.0	0.0	78.0
Total	Lumens	4837.0	0.0	4837.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.1	1.8
10°-20°	230.4	4.8
20°-30°	371.8	7.7
30°-40°	558.1	11.5
40°-50°	791.6	16.4
50°-60°	999.7	20.7
60°-70°	1015.4	21.0
70°-80°	692.0	14.3
80°-90°	89.8	1.9
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°	4837.0	100.0
0°-180°	4837.0	100.0

Coefficient of Utilization



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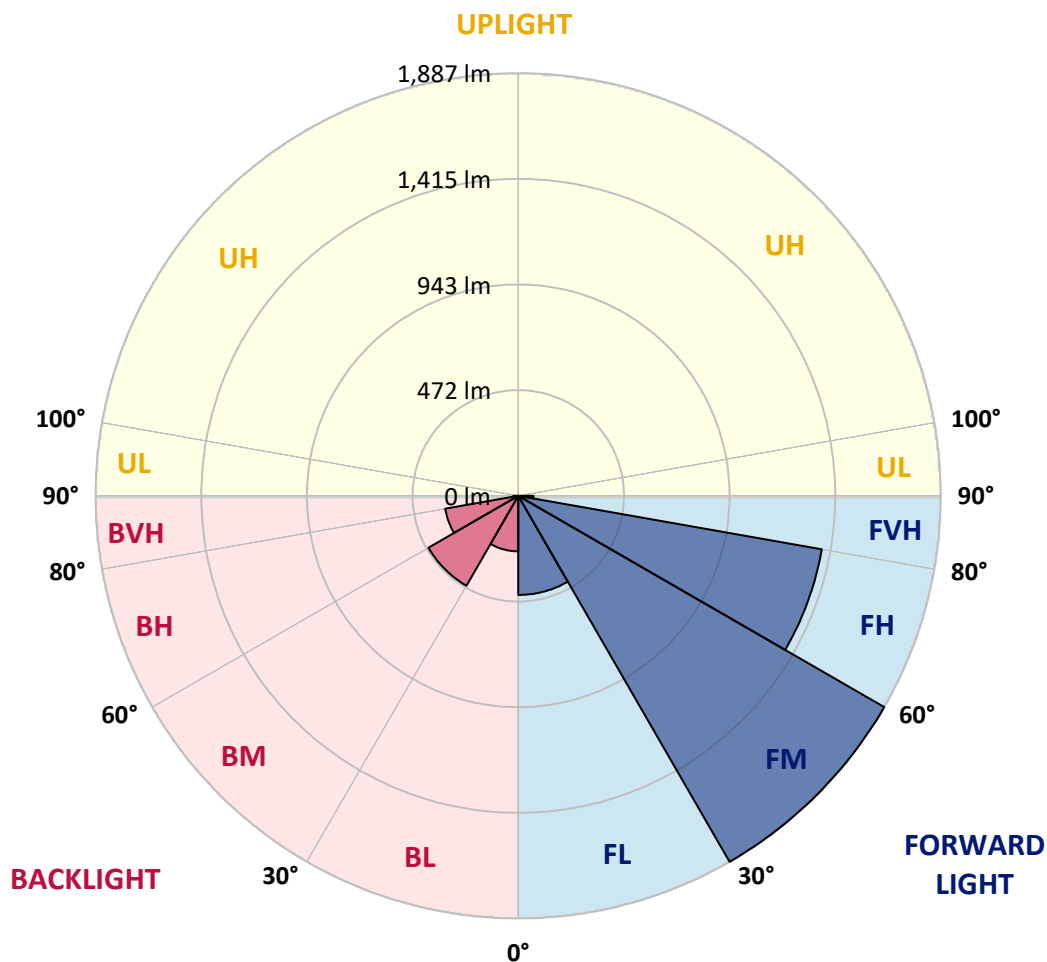
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	442.5	9.1			
FM	(30°-60°)	1886.5	39.0			
FH	(60°-80°)	1376.0	28.4			G1/1800
FVH	(80°-90°)	67.6	1.4			G1/100
BL	(0°-30°)	247.9	5.1	B1/500		
BM	(30°-60°)	462.9	9.6	B1/1000		
BH	(60°-80°)	331.4	6.9	B1/500		G1/500
BVH	(80°-90°)	22.2	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	971.0	971.0	971.0	971.0	971.0	971.0	971.0	971.0	971.0	971.0	971.0
2.5°	971.5	966.9	969.6	968.6	970.0	971.5	972.0	972.7	975.3	975.1	974.8
5°	969.4	964.8	968.6	967.4	970.7	974.3	977.3	980.2	984.3	986.0	983.5
7.5°	965.1	962.1	965.9	969.6	975.8	981.2	985.5	992.0	997.8	998.9	1000.6
10°	939.7	937.5	946.4	956.4	973.2	987.9	997.3	1004.7	1011.2	1012.2	1014.7
12.5°	913.4	910.6	920.6	934.1	961.6	987.9	1007.8	1017.5	1023.2	1026.5	1030.3
15°	909.1	906.7	912.4	924.1	946.9	980.9	1015.0	1032.9	1037.7	1041.6	1043.1
17.5°	930.1	925.7	928.0	932.1	945.4	974.6	1020.6	1050.3	1057.7	1061.8	1061.8
20°	978.7	972.5	968.9	960.7	958.5	975.6	1020.1	1071.2	1081.0	1086.1	1087.4
22.5°	1043.3	1039.2	1031.7	1010.9	988.4	988.1	1029.8	1098.2	1116.3	1121.1	1118.1
25°	1121.7	1115.5	1105.8	1077.7	1034.4	1012.9	1046.2	1132.4	1162.9	1164.2	1155.2
27.5°	1211.8	1202.5	1189.2	1152.1	1093.8	1051.9	1071.2	1171.8	1216.4	1215.9	1197.4
30°	1306.7	1297.4	1283.4	1238.3	1164.9	1104.2	1106.1	1214.3	1279.8	1276.9	1245.5
32.5°	1376.0	1369.1	1366.3	1331.5	1246.8	1166.2	1145.9	1261.4	1358.1	1355.6	1311.5
35°	1429.3	1420.2	1423.6	1405.9	1336.1	1235.5	1194.8	1317.4	1453.2	1453.0	1398.3
37.5°	1481.9	1473.9	1476.8	1465.0	1418.7	1323.6	1254.5	1386.0	1571.2	1576.9	1503.2
40°	1530.0	1521.6	1532.9	1521.8	1483.0	1417.2	1322.2	1463.5	1707.9	1718.6	1630.1
42.5°	1558.9	1552.3	1570.9	1571.2	1538.7	1496.3	1396.8	1549.0	1866.0	1890.0	1786.2
45°	1568.9	1566.6	1594.8	1600.6	1588.1	1542.0	1463.8	1642.0	2036.4	2079.3	1964.0
47.5°	1558.2	1553.8	1592.7	1614.5	1624.4	1563.5	1519.3	1742.9	2210.3	2273.2	2157.9
50°	1503.9	1495.5	1553.3	1599.1	1634.7	1577.6	1575.3	1859.4	2408.1	2476.9	2352.9
52.5°	1406.4	1400.0	1465.9	1545.4	1612.1	1584.5	1638.3	1986.4	2595.9	2685.0	2552.7
55°	1281.9	1273.4	1345.8	1449.7	1556.2	1582.2	1701.2	2128.7	2817.5	2907.8	2759.2
57.5°	1084.3	1067.4	1159.1	1281.9	1464.8	1579.4	1766.7	2270.2	3042.6	3150.8	2979.5
60°	796.2	771.1	883.4	1029.1	1286.2	1552.1	1847.8	2428.8	3312.8	3410.3	3219.9
62.5°	463.6	449.1	522.4	658.4	969.4	1390.8	1893.4	2613.3	3578.4	3680.8	3456.4
65°	360.0	355.9	362.3	372.8	539.6	1041.3	1752.9	2793.2	3916.1	3987.8	3702.7
67.5°	329.3	326.3	329.0	309.3	273.8	580.0	1386.7	2838.7	4277.9	4321.4	3918.5
70°	292.7	289.2	298.4	281.5	215.5	263.8	896.1	2673.4	4565.8	4647.3	4082.5
72.5°	238.4	234.3	255.8	248.2	181.4	169.3	450.1	2280.7	4535.6	4705.0	3965.0
75°	183.2	180.9	206.4	212.9	147.9	133.4	216.0	1695.4	3991.3	4162.0	3417.2
77.5°	142.3	140.4	153.5	176.8	119.2	103.3	132.8	1075.3	3007.9	3037.8	2354.9
80°	106.7	101.6	113.6	136.8	92.9	75.4	90.1	627.1	1901.3	1723.4	1025.0
82.5°	66.7	64.3	74.2	91.3	65.5	52.0	58.6	346.4	762.0	448.7	197.8
85°	38.1	37.1	40.4	52.2	35.6	29.9	33.5	153.0	139.2	95.7	59.7
87.5°	15.4	14.9	18.4	23.3	13.0	11.0	11.8	36.8	30.7	28.4	19.7
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°	971.0	971.0	971.0	971.0	971.0	971.0	971.0	971.0	971.0	971.0	971.0
2.5°	973.7	973.7	970.2	964.6	958.2	954.1	947.4	945.7	938.7	936.6	940.0
5°	985.5	983.5	972.5	956.6	934.9	914.9	893.0	879.1	859.7	852.8	857.9
7.5°	1000.4	994.8	975.8	941.1	895.5	850.7	804.1	768.9	735.0	723.0	724.6
10°	1013.9	1006.0	973.7	912.9	834.0	756.6	682.3	630.5	591.0	574.9	578.5
12.5°	1027.6	1012.9	960.2	866.1	746.8	641.6	562.6	522.2	497.9	478.5	484.8
15°	1040.3	1019.9	939.2	803.4	651.2	544.5	486.2	453.9	434.4	421.7	423.9
17.5°	1055.1	1025.7	907.7	723.9	560.1	477.1	429.6	410.1	406.3	404.8	405.8
20°	1075.8	1031.1	866.3	634.8	493.0	423.4	398.9	397.1	396.9	396.1	398.6
22.5°	1098.2	1037.5	811.6	553.9	435.9	389.9	385.6	382.0	379.7	379.5	382.2
25°	1124.5	1039.6	743.0	487.7	387.3	374.0	368.9	363.6	362.0	362.0	363.6
27.5°	1150.0	1032.7	663.2	430.1	360.0	359.5	352.8	351.1	350.8	351.6	353.6
30°	1175.7	1019.6	583.8	376.9	344.1	344.1	341.8	343.1	344.1	346.7	348.5
32.5°	1210.2	1005.7	517.6	337.4	330.4	327.8	330.0	332.6	333.6	336.9	339.8
35°	1260.9	996.1	464.9	316.0	316.0	312.6	314.0	313.4	311.1	309.5	313.1
37.5°	1327.9	995.6	421.4	306.0	303.9	303.4	303.7	300.3	291.4	280.6	281.0
40°	1408.5	1009.3	387.9	299.1	297.6	300.6	299.1	290.2	265.6	246.9	246.4
42.5°	1516.7	1048.8	366.4	290.7	295.3	299.1	292.9	262.0	245.4	232.9	232.4
45°	1644.1	1112.7	355.4	281.7	290.9	295.5	265.9	252.3	238.9	223.9	222.8
47.5°	1788.4	1193.3	352.8	273.3	281.2	284.0	254.3	248.2	233.1	216.7	215.5
50°	1945.6	1288.7	359.8	263.3	267.1	257.4	250.5	244.9	229.3	213.1	211.4
52.5°	2108.0	1393.9	373.5	249.7	253.1	242.3	249.0	244.1	226.9	205.2	203.7
55°	2267.7	1499.9	386.8	233.8	238.7	228.8	244.6	241.0	216.5	191.9	190.6
57.5°	2429.9	1605.3	400.0	219.8	224.9	215.7	237.7	232.9	204.7	179.6	179.1
60°	2598.5	1707.5	406.0	206.2	209.8	203.7	227.2	218.7	191.4	167.1	166.4
62.5°	2756.3	1792.8	396.1	192.7	195.0	192.4	213.4	202.1	178.0	153.0	152.7
65°	2914.7	1843.5	365.4	179.4	179.9	178.6	193.9	184.2	162.5	140.7	139.2
67.5°	3058.3	1871.9	316.5	165.0	163.8	163.3	175.8	164.8	147.4	128.4	126.9
70°	3088.7	1799.7	241.8	148.1	148.1	146.9	155.8	144.5	130.8	115.4	114.9
72.5°	2821.1	1513.9	171.7	128.9	131.0	128.4	135.8	126.4	113.9	103.6	100.6
75°	2274.8	1110.2	124.8	109.3	112.9	108.4	115.4	108.8	98.0	97.8	88.0
77.5°	1563.0	686.4	90.6	90.1	92.7	87.0	94.9	91.3	81.6	77.3	72.4
80°	667.1	273.8	66.0	69.6	69.6	64.5	73.7	74.7	66.3	64.3	64.3
82.5°	132.8	77.8	46.3	47.9	45.0	43.5	52.2	57.8	79.8	88.8	89.1
85°	39.9	28.7	27.9	26.1	23.1	23.3	30.7	58.1	71.6	40.9	35.3
87.5°	11.0	7.2	7.4	5.8	4.8	6.4	10.5	44.0	24.1	10.2	8.7
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)