

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: P961074

Luminaire Tested: **NAV-SB1D-835-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961074
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-835-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7327.7 lumens
Efficiency: N/A
Efficacy: 92.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

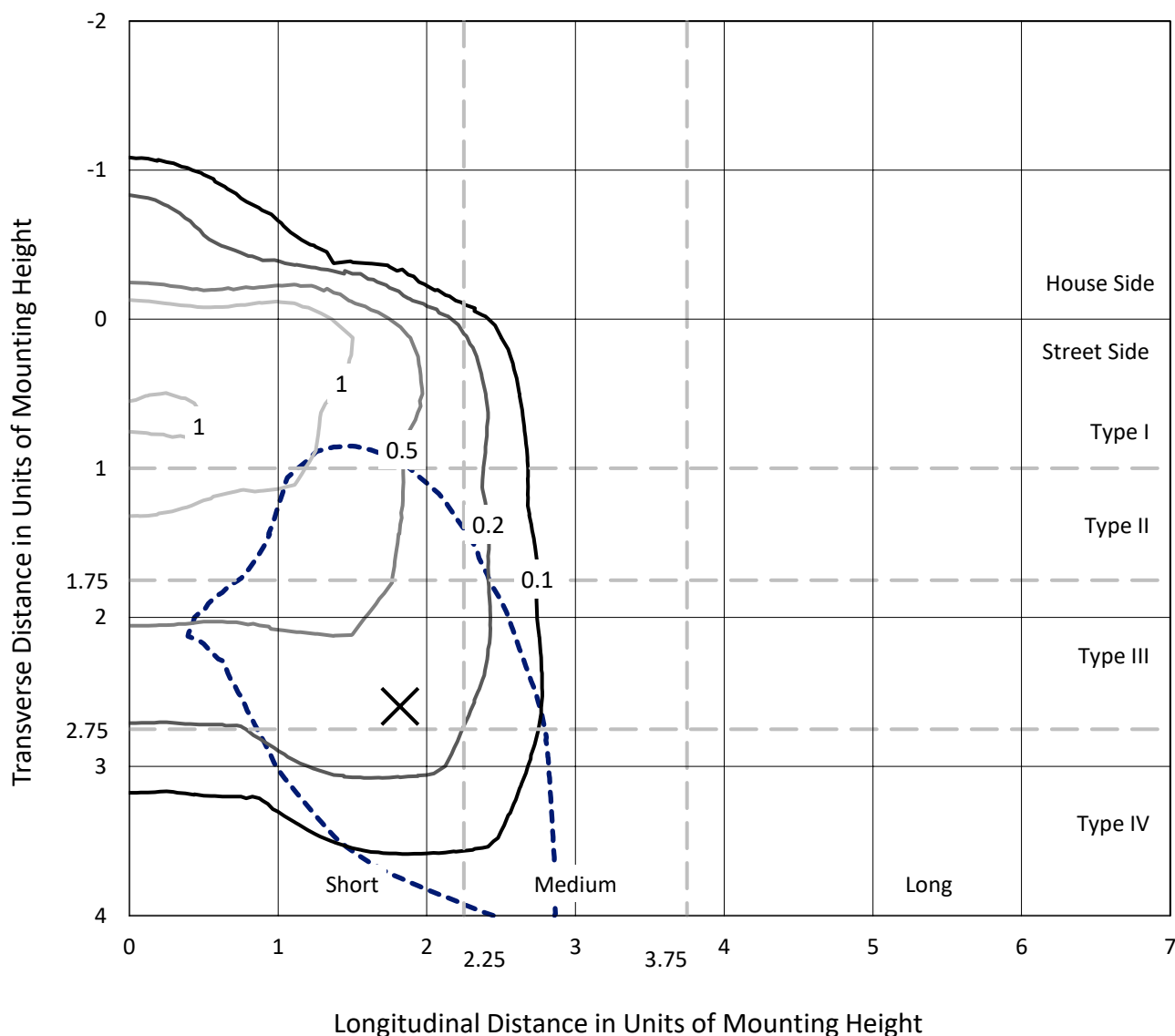
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

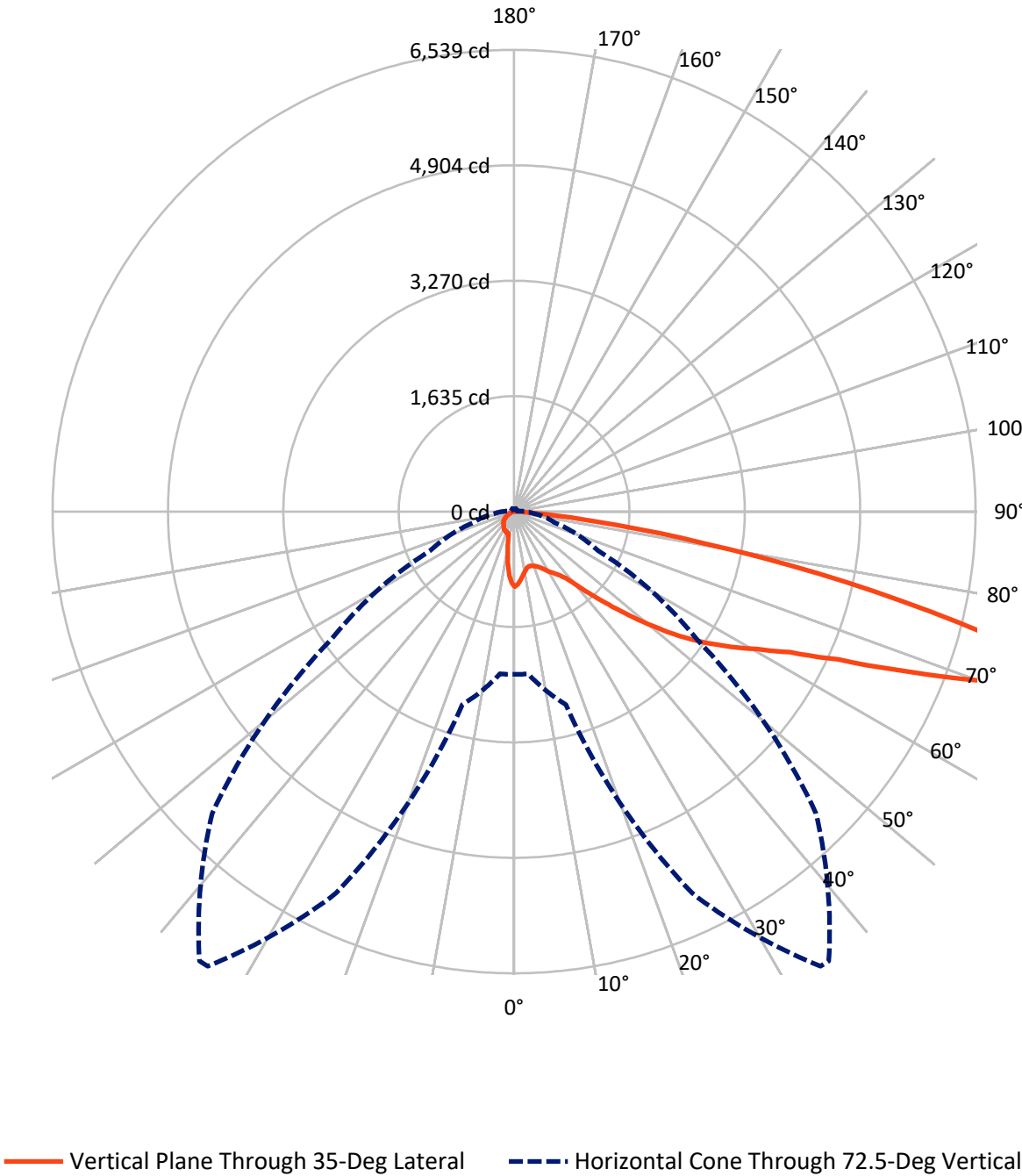
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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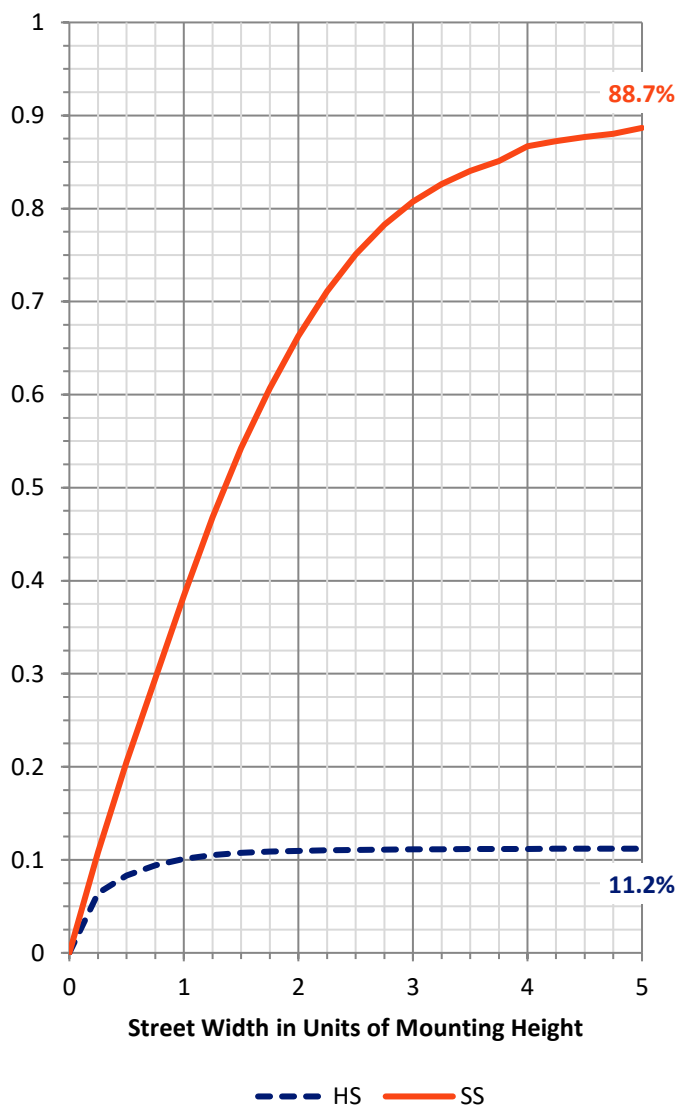
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	824.7	0.0	824.7
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	6503.0	0.0	6503.0
	% Fixture	88.7	0.0	88.7
Total	Lumens	7327.7	0.0	7327.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.3	1.2
10°-20°	204.2	2.8
20°-30°	331.7	4.5
30°-40°	553.4	7.6
40°-50°	1047.0	14.3
50°-60°	1663.6	22.7
60°-70°	2058.0	28.1
70°-80°	1279.3	17.5
80°-90°	103.4	1.4
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°	7327.7	100.0
0°-180°	7327.7	100.0

Coefficient of Utilization



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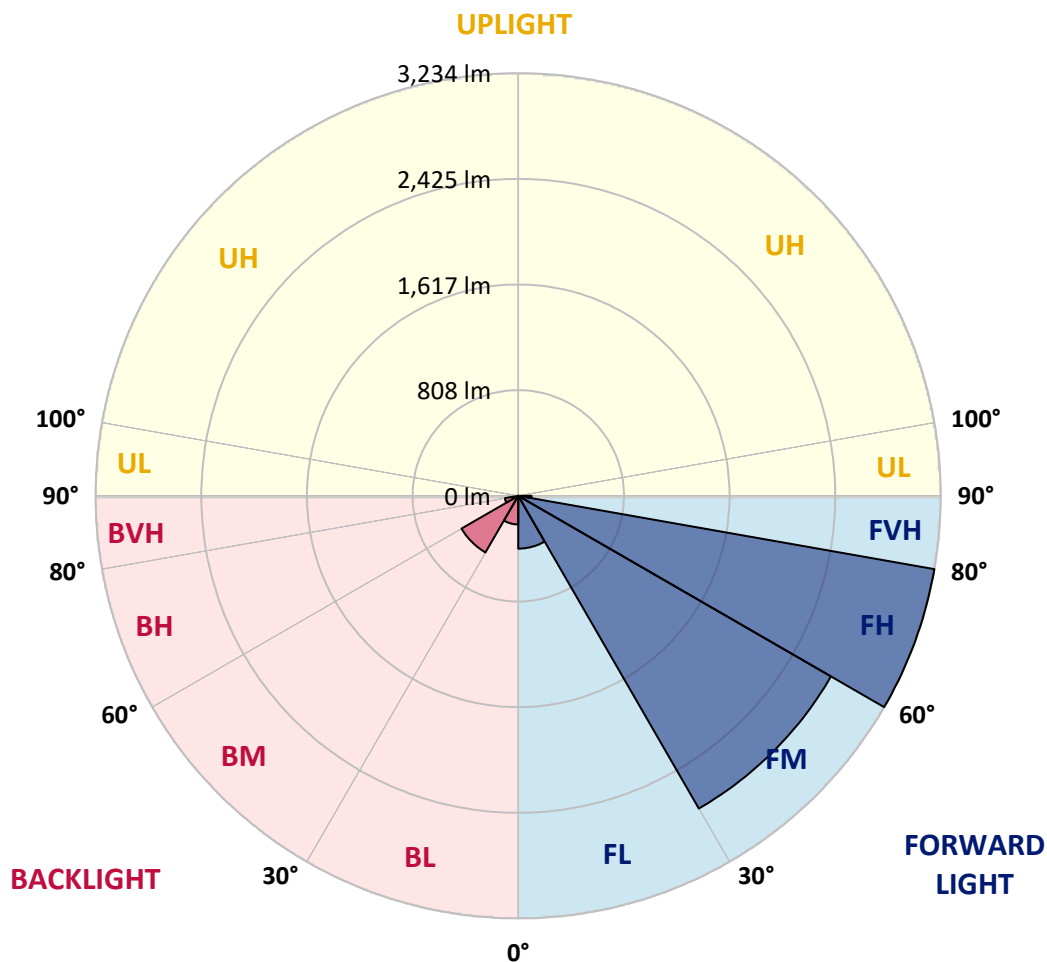
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	403.9	5.5			
FM	(30°-60°)	2763.3	37.7			
FH	(60°-80°)	3233.8	44.1			G2/5000
FVH	(80°-90°)	102.0	1.4			G2/225
BL	(0°-30°)	219.1	3.0	B1/500		
BM	(30°-60°)	500.7	6.8	B1/1000		
BH	(60°-80°)	103.5	1.4	B0/110		G0/110
BVH	(80°-90°)	1.4	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0
2.5°	1014.7	1023.4	1025.0	1027.7	1027.7	1030.8	1036.3	1043.8	1056.2	1062.6	1066.8
5°	935.3	941.8	949.8	956.2	968.6	970.3	991.2	1011.6	1040.1	1061.5	1076.6
7.5°	855.4	862.8	873.6	889.2	905.3	910.1	941.8	976.1	1021.2	1061.5	1086.7
10°	799.0	799.5	809.1	824.7	850.4	856.4	895.0	943.9	1000.3	1055.0	1096.4
12.5°	767.2	771.0	775.3	787.1	811.8	815.6	856.9	914.4	979.4	1051.3	1107.7
15°	767.2	770.0	772.6	778.5	798.4	801.7	838.1	895.5	968.6	1052.9	1126.0
17.5°	775.3	779.6	777.5	784.4	805.3	807.5	839.8	890.2	968.1	1063.1	1153.8
20°	794.7	797.9	793.6	797.9	818.8	823.1	856.4	900.5	977.2	1080.9	1188.8
22.5°	825.2	826.9	816.6	819.9	841.3	846.8	885.4	929.4	999.2	1109.3	1235.4
25°	863.9	867.2	851.6	855.4	875.8	882.1	926.7	972.9	1034.1	1148.5	1295.1
27.5°	908.5	910.1	896.7	896.2	922.4	931.5	976.6	1026.6	1080.9	1197.9	1370.2
30°	959.5	964.3	951.4	949.3	982.6	990.0	1034.6	1092.6	1149.5	1271.9	1477.0
32.5°	999.8	1003.5	996.0	1001.3	1035.1	1041.1	1104.9	1186.0	1257.5	1377.2	1622.6
35°	1057.7	1059.8	1042.7	1052.4	1091.0	1106.1	1201.1	1317.0	1393.3	1509.3	1812.6
37.5°	1267.7	1267.7	1194.6	1146.9	1183.9	1197.3	1332.6	1481.9	1560.9	1686.4	2052.2
40°	1558.1	1553.3	1446.5	1348.8	1343.9	1370.2	1520.1	1689.7	1777.2	1899.1	2321.6
42.5°	1868.0	1860.5	1714.9	1618.3	1602.2	1611.3	1736.5	1945.8	2034.9	2158.4	2611.6
45°	2142.9	2140.7	2007.6	1877.6	1848.6	1877.6	2006.4	2245.4	2309.3	2439.2	2901.0
47.5°	2373.2	2373.2	2276.0	2191.1	2176.2	2193.3	2372.2	2577.8	2571.8	2738.3	3182.8
50°	2638.5	2636.3	2543.9	2507.5	2523.0	2547.1	2793.0	2927.8	2843.6	3032.1	3434.7
52.5°	2824.2	2837.1	2805.4	2799.5	2879.0	2920.8	3220.4	3270.4	3086.8	3310.6	3623.2
55°	2971.4	2986.3	3022.8	3064.2	3217.3	3272.0	3634.4	3595.2	3290.2	3552.2	3731.6
57.5°	3179.7	3158.2	3214.6	3296.2	3543.7	3609.7	4035.5	3901.9	3454.0	3748.2	3743.4
60°	3432.5	3435.8	3445.4	3548.6	3869.6	3954.4	4430.7	4191.7	3559.2	3868.6	3612.4
62.5°	3736.4	3741.2	3761.1	3919.5	4307.2	4387.2	4851.6	4429.0	3607.6	3834.7	3274.2
65°	3715.5	3735.9	3957.6	4499.4	4972.5	5051.4	5342.9	4595.5	3534.6	3525.4	2665.8
67.5°	3384.8	3418.1	3789.0	5192.0	5975.4	6063.5	5936.8	4628.3	3219.4	2741.6	1739.1
70°	2951.0	2962.8	3408.9	5814.8	7136.8	7225.9	6468.3	4268.0	2443.0	1529.2	779.1
72.5°	2304.5	2307.2	2830.6	5959.3	7767.1	7772.0	6051.1	3168.4	1313.8	587.4	270.6
75°	1646.3	1630.1	1895.8	4832.9	6833.4	6888.2	4536.4	1486.2	502.0	277.6	134.8
77.5°	882.7	900.5	1072.8	2866.1	4720.6	4814.0	2475.2	428.4	255.5	189.0	89.2
80°	272.8	287.8	439.7	1312.2	2673.9	2730.3	917.6	190.6	178.2	134.8	58.5
82.5°	85.9	89.2	205.1	551.4	1109.9	1135.6	265.8	107.9	121.9	89.2	34.3
85°	24.7	25.2	91.3	205.6	274.4	279.7	74.6	41.9	69.8	55.4	17.7
87.5°	2.7	8.6	34.3	34.3	24.2	23.6	8.1	9.1	19.9	7.0	3.2
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°	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0
2.5°	1064.2	1064.7	1057.7	1045.9	1033.0	1022.3	1008.9	998.1	990.7	988.5	992.2
5°	1071.7	1067.9	1048.1	1012.1	969.1	932.1	890.7	858.0	836.5	827.4	830.7
7.5°	1083.0	1072.3	1028.8	957.9	875.8	802.7	728.6	671.2	634.7	616.4	619.1
10°	1092.6	1071.1	996.5	879.4	753.9	643.2	543.4	474.1	435.4	417.2	417.7
12.5°	1101.8	1070.6	954.7	786.6	616.4	481.0	388.2	353.8	343.1	339.4	338.2
15°	1119.0	1072.3	902.0	680.3	479.5	363.5	329.6	329.1	331.3	330.3	329.6
17.5°	1142.6	1073.9	842.4	567.5	369.9	320.5	319.0	323.8	327.0	325.3	324.8
20°	1173.2	1080.2	779.1	455.8	317.9	309.8	313.5	317.9	320.5	317.9	317.3
22.5°	1216.2	1091.5	709.8	366.2	301.2	303.4	306.6	311.4	314.1	310.4	309.8
25°	1268.7	1109.3	641.6	318.4	293.2	295.8	300.6	306.1	309.2	305.6	304.9
27.5°	1336.9	1137.8	578.8	307.7	285.2	286.7	293.7	301.8	306.1	301.2	301.2
30°	1435.7	1184.5	524.6	312.5	280.2	276.5	286.2	297.5	302.3	298.0	297.5
32.5°	1566.7	1250.5	491.3	320.0	278.1	264.7	273.9	288.3	296.4	293.7	293.7
35°	1738.6	1350.8	478.4	328.6	276.5	252.4	258.8	274.4	288.3	291.0	291.0
37.5°	1946.9	1490.5	482.2	332.3	271.7	242.1	245.4	258.8	277.1	285.7	287.8
40°	2183.7	1653.2	503.6	328.6	266.3	233.6	234.1	244.3	260.5	273.3	277.6
42.5°	2427.9	1843.3	543.4	314.7	261.5	226.0	224.5	231.4	242.1	251.3	255.0
45°	2660.5	2038.7	582.6	295.3	255.5	218.5	214.7	217.4	219.6	223.3	225.5
47.5°	2863.4	2176.2	571.3	277.6	247.5	209.9	203.5	202.4	196.0	195.5	194.9
50°	3003.6	2206.2	507.4	259.8	235.7	200.3	190.0	183.6	172.3	167.0	167.5
52.5°	3048.1	2087.5	414.5	242.1	216.4	187.4	172.9	162.7	148.7	143.9	143.4
55°	2989.0	1855.0	331.3	220.7	189.5	170.3	154.1	140.6	129.4	123.5	123.5
57.5°	2844.6	1559.2	262.0	195.5	161.0	150.9	134.8	121.4	111.7	105.8	104.7
60°	2605.1	1238.1	207.3	165.3	137.5	130.0	113.3	104.7	96.1	89.2	87.5
62.5°	2241.7	883.8	162.7	131.0	114.9	106.3	96.7	90.2	80.1	70.3	68.7
65°	1749.3	540.7	125.7	96.1	92.4	88.0	82.1	76.3	63.9	54.2	52.6
67.5°	1103.4	256.1	89.7	72.5	73.0	70.8	68.2	63.3	54.2	45.6	44.6
70°	486.0	124.0	59.0	55.4	54.2	54.2	56.4	54.7	46.1	38.1	36.5
72.5°	165.3	66.6	44.1	41.9	39.2	38.6	47.3	45.6	37.0	29.5	27.9
75°	86.4	44.6	32.2	30.0	23.6	28.5	37.6	35.5	26.3	19.4	17.7
77.5°	56.4	31.7	22.0	19.4	13.4	18.8	27.9	24.7	15.6	9.6	8.6
80°	35.5	20.9	12.9	9.1	6.5	10.2	15.1	10.8	5.9	2.2	1.6
82.5°	18.8	10.8	4.8	3.2	2.7	3.2	3.8	2.7	1.0	0.0	0.0
85°	7.5	3.8	1.6	1.0	0.5	0.0	1.0	0.5	0.0	0.0	0.0
87.5°	2.7	0.5	0.0	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)