

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: P882050

Luminaire Tested: **NAV-SB1D-727-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882050
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-727-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6988 lumens
Efficiency: N/A
Efficacy: 87.8 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

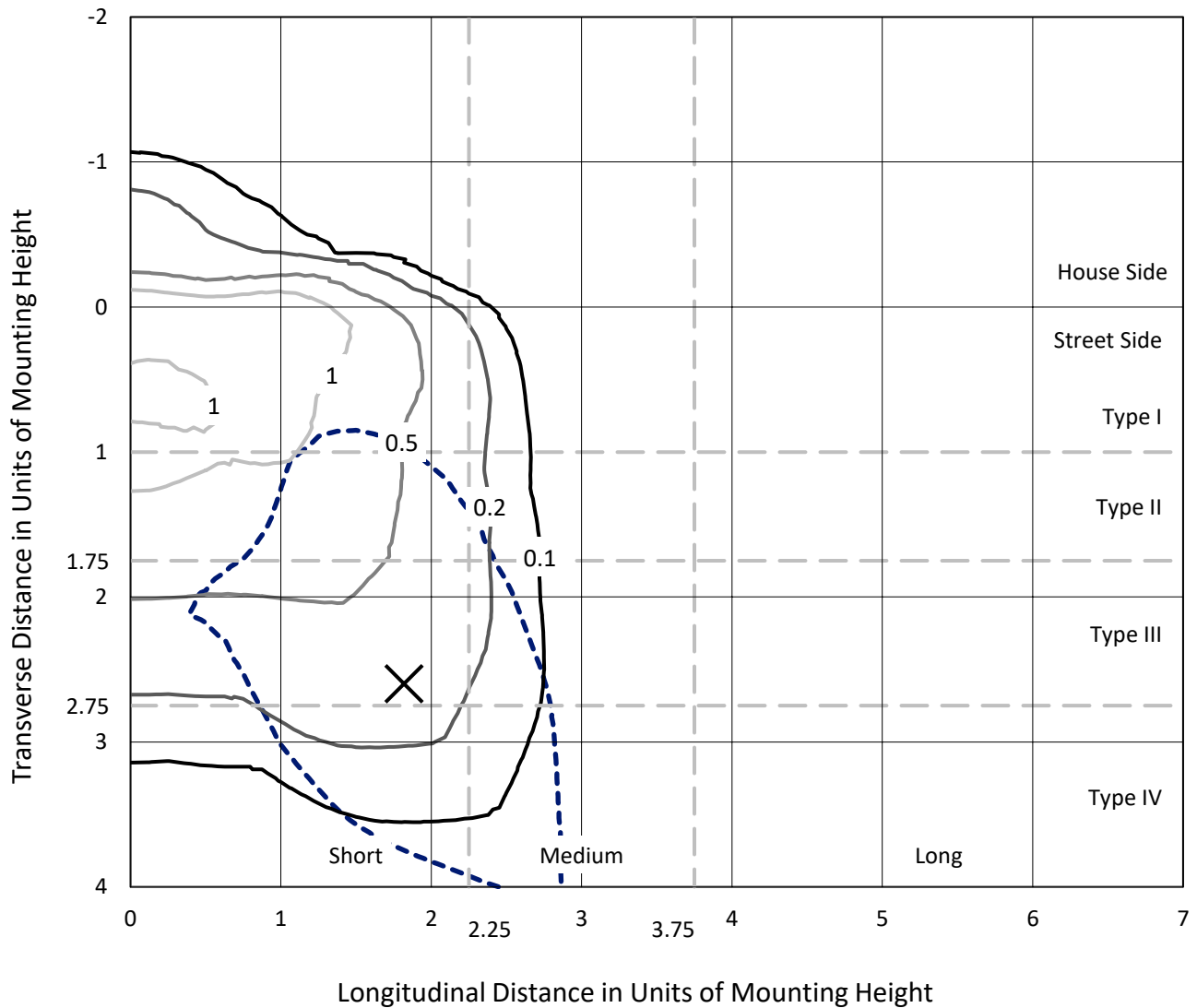
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

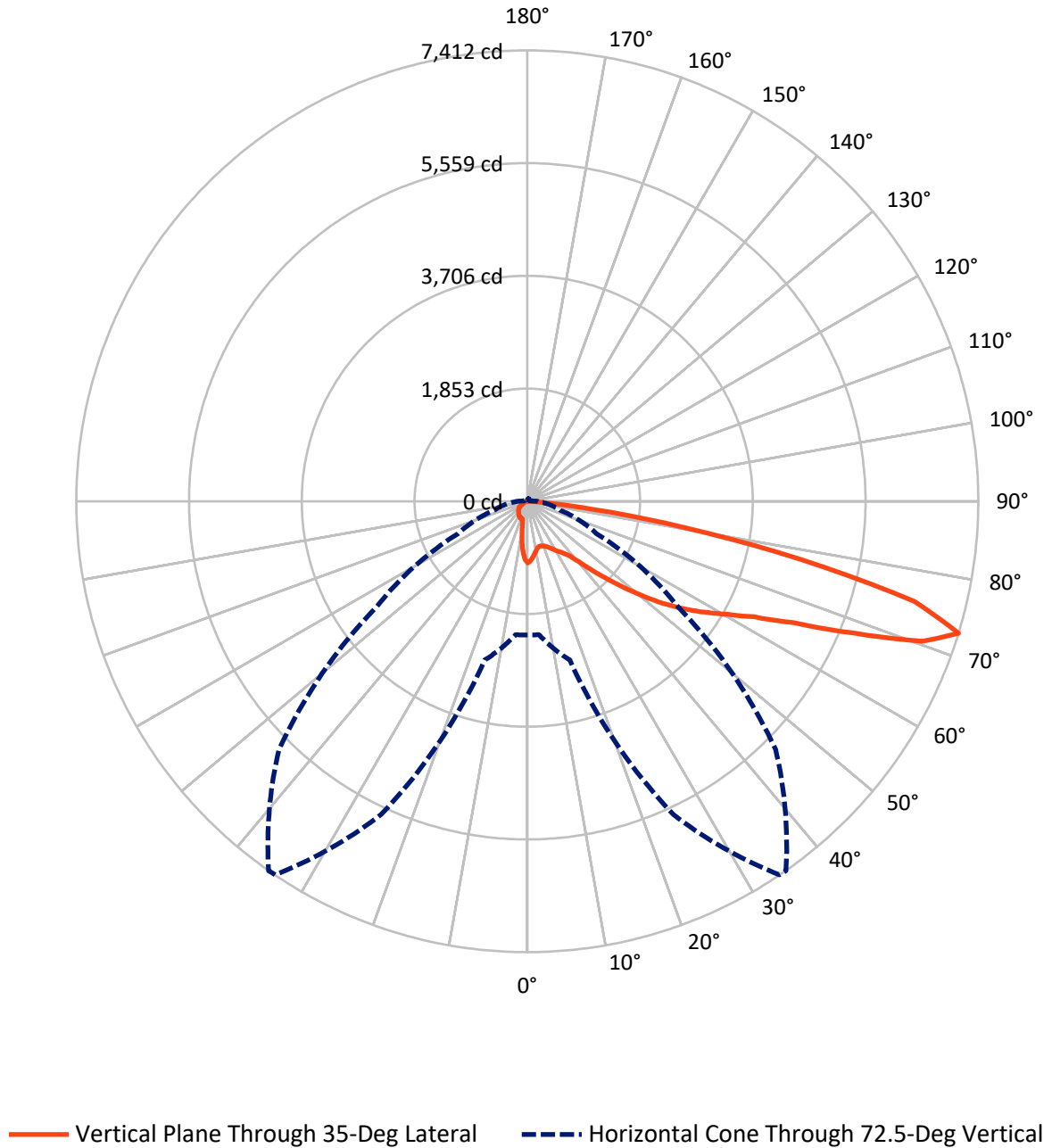
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	786.5	0.0	786.5
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	6201.5	0.0	6201.5
	% Fixture	88.7	0.0	88.7
Total	Lumens	6988.0	0.0	6988.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.2	1.2
10°-20°	194.7	2.8
20°-30°	316.3	4.5
30°-40°	527.7	7.6
40°-50°	998.4	14.3
50°-60°	1586.5	22.7
60°-70°	1962.6	28.1
70°-80°	1220.0	17.5
80°-90°	98.6	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°	6988.0	100.0
0°-180°	6988.0	100.0

Coefficient of Utilization



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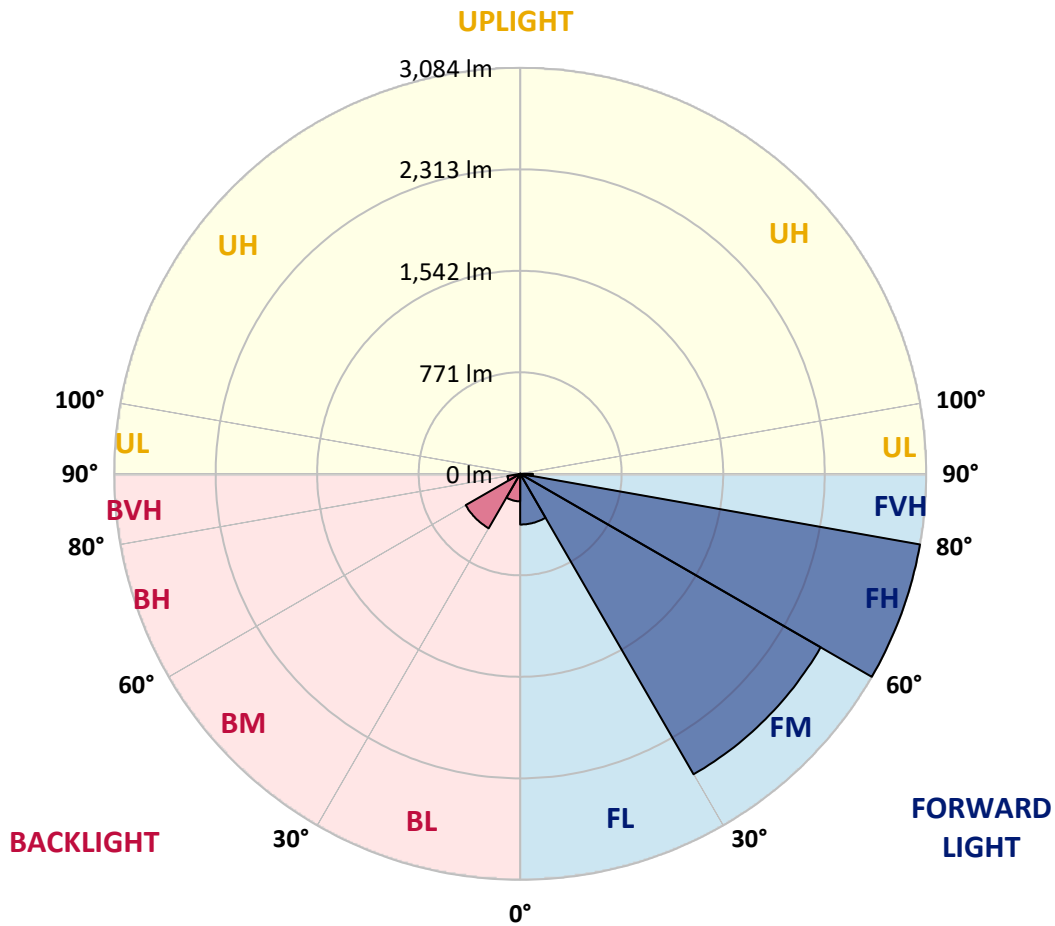
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	385.2	5.5			
FM (30°-60°)	2635.2	37.7			
FH (60°-80°)	3083.9	44.1			G2/5000
FVH (80°-90°)	97.3	1.4			G1/100
BL (0°-30°)	209.0	3.0	B1/500		
BM (30°-60°)	477.5	6.8	B1/1000		
BH (60°-80°)	98.7	1.4	B0/110		G0/110
BVH (80°-90°)	1.3	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°	1012.8	1012.8	1012.8	1012.8	1012.8	1012.8	1012.8	1012.8	1012.8	1012.8	1012.8
2.5°	967.7	975.9	977.5	980.0	980.0	983.1	988.2	995.4	1007.2	1013.3	1017.4
5°	892.0	898.1	905.8	911.9	923.7	925.2	945.2	964.7	991.8	1012.3	1026.6
7.5°	815.7	822.8	833.1	847.9	863.3	867.9	898.1	930.9	973.9	1012.3	1036.3
10°	761.9	762.4	771.6	786.5	811.1	816.7	853.6	900.1	953.9	1006.1	1045.6
12.5°	731.7	735.3	739.4	750.6	774.2	777.8	817.2	872.0	933.9	1002.6	1056.3
15°	731.7	734.3	736.8	742.4	761.4	764.5	799.3	854.1	923.7	1004.1	1073.7
17.5°	739.4	743.5	741.4	748.1	768.0	770.1	800.8	848.9	923.2	1013.8	1100.4
20°	757.8	760.9	756.8	760.9	780.8	784.9	816.7	858.7	931.9	1030.7	1133.6
22.5°	787.0	788.5	778.8	781.9	802.4	807.5	844.3	886.3	952.9	1057.9	1178.2
25°	823.9	826.9	812.1	815.7	835.1	841.3	883.8	927.8	986.2	1095.2	1235.0
27.5°	866.4	867.9	855.1	854.6	879.7	888.4	931.4	979.0	1030.7	1142.3	1306.7
30°	915.0	919.6	907.3	905.3	937.0	944.2	986.7	1042.0	1096.3	1213.0	1408.6
32.5°	953.4	957.0	949.8	954.9	987.2	992.8	1053.8	1131.1	1199.2	1313.4	1547.4
35°	1008.7	1010.7	994.4	1003.6	1040.4	1054.8	1145.4	1256.0	1328.7	1439.3	1728.6
37.5°	1208.9	1208.9	1139.3	1093.7	1129.0	1141.8	1270.9	1413.2	1488.5	1608.3	1957.0
40°	1485.9	1481.3	1379.4	1286.2	1281.6	1306.7	1449.6	1611.4	1694.8	1811.1	2214.0
42.5°	1781.4	1774.2	1635.4	1543.3	1527.9	1536.6	1655.9	1855.6	1940.6	2058.4	2490.5
45°	2043.5	2041.5	1914.5	1790.6	1762.9	1790.6	1913.5	2141.3	2202.2	2326.2	2766.5
47.5°	2263.2	2263.2	2170.5	2089.6	2075.3	2091.6	2262.1	2458.3	2452.6	2611.4	3035.3
50°	2516.1	2514.1	2426.0	2391.2	2406.0	2429.1	2663.6	2792.1	2711.7	2891.4	3275.5
52.5°	2693.3	2705.6	2675.4	2669.7	2745.5	2785.4	3071.2	3118.8	2943.7	3157.2	3455.2
55°	2833.6	2847.9	2882.7	2922.2	3068.1	3120.3	3465.9	3428.6	3137.7	3387.6	3558.6
57.5°	3032.2	3011.8	3065.5	3143.4	3379.4	3442.4	3848.4	3720.9	3293.9	3574.5	3569.9
60°	3273.4	3276.5	3285.7	3384.0	3690.2	3771.1	4225.3	3997.4	3394.2	3689.2	3444.9
62.5°	3563.2	3567.8	3586.8	3737.8	4107.5	4183.8	4626.7	4223.7	3440.3	3656.9	3122.4
65°	3543.2	3562.7	3774.2	4290.8	4741.9	4817.2	5095.2	4382.5	3370.7	3362.0	2542.2
67.5°	3227.8	3259.6	3613.4	4951.3	5698.4	5782.4	5661.5	4413.7	3070.1	2614.4	1658.5
70°	2814.1	2825.4	3250.9	5545.3	6805.9	6890.9	6168.4	4070.1	2329.7	1458.3	743.0
72.5°	2197.6	2200.2	2699.4	5683.0	7407.0	7411.6	5770.6	3021.5	1252.9	560.2	258.1
75°	1569.9	1554.5	1808.0	4608.8	6516.6	6568.8	4326.1	1417.3	478.7	264.7	128.5
77.5°	841.8	858.7	1023.0	2733.2	4501.8	4590.9	2360.5	408.6	243.7	180.2	85.0
80°	260.1	274.4	419.4	1251.4	2549.9	2603.7	875.1	181.8	170.0	128.5	55.8
82.5°	81.9	85.0	195.6	525.9	1058.4	1082.9	253.5	102.9	116.2	85.0	32.8
85°	23.6	24.1	87.0	196.1	261.6	266.8	71.2	39.9	66.6	52.7	16.9
87.5°	2.6	8.2	32.8	32.8	23.0	22.5	7.7	8.7	18.9	6.7	3.1
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°	1012.8	1012.8	1012.8	1012.8	1012.8	1012.8	1012.8	1012.8	1012.8	1012.8	1012.8
2.5°	1014.8	1015.4	1008.7	997.4	985.1	974.9	962.1	951.9	944.7	942.6	946.2
5°	1022.0	1018.4	999.5	965.2	924.2	888.9	849.5	818.2	797.7	789.0	792.1
7.5°	1032.8	1022.5	981.0	913.5	835.1	765.5	694.8	640.0	605.2	587.8	590.4
10°	1042.0	1021.5	950.3	838.7	718.9	613.4	518.2	452.1	415.3	397.8	398.4
12.5°	1050.7	1021.0	910.4	750.1	587.8	458.8	370.2	337.4	327.2	323.6	322.6
15°	1067.1	1022.5	860.2	648.7	457.2	346.6	314.4	313.9	315.9	314.9	314.4
17.5°	1089.6	1024.1	803.4	541.2	352.8	305.7	304.1	308.8	311.8	310.3	309.8
20°	1118.8	1030.2	743.0	434.7	303.1	295.4	299.0	303.1	305.7	303.1	302.6
22.5°	1159.7	1041.0	676.9	349.2	287.2	289.3	292.4	297.0	299.5	296.0	295.4
25°	1209.9	1057.9	611.9	303.6	279.6	282.1	286.7	291.9	294.9	291.3	290.8
27.5°	1275.0	1085.0	552.0	293.4	271.9	273.4	280.1	287.8	291.9	287.2	287.2
30°	1369.2	1129.5	500.3	298.0	267.3	263.7	272.9	283.7	288.3	284.2	283.7
32.5°	1494.1	1192.5	468.5	305.2	265.2	252.4	261.1	275.0	282.6	280.1	280.1
35°	1658.0	1288.3	456.2	313.4	263.7	240.7	246.8	261.6	275.0	277.5	277.5
37.5°	1856.6	1421.4	459.8	316.9	259.1	230.9	234.0	246.8	264.2	272.4	274.4
40°	2082.4	1576.5	480.3	313.4	254.0	222.7	223.2	233.0	248.3	260.6	264.7
42.5°	2315.4	1757.8	518.2	300.0	249.4	215.6	214.0	220.7	230.9	239.6	243.2
45°	2537.1	1944.2	555.6	281.6	243.7	208.4	204.8	207.4	209.4	213.0	215.1
47.5°	2730.7	2075.3	544.8	264.7	236.0	200.2	194.1	193.0	186.9	186.4	185.9
50°	2864.3	2103.9	483.9	247.8	224.8	191.0	181.3	175.1	164.4	159.2	159.8
52.5°	2906.8	1990.8	395.3	230.9	206.3	178.7	164.9	155.1	141.8	137.2	136.7
55°	2850.5	1769.1	315.9	210.4	180.7	162.3	147.0	134.2	123.4	117.8	117.8
57.5°	2712.7	1486.9	249.9	186.4	153.6	143.9	128.5	115.7	106.5	100.9	99.8
60°	2484.4	1180.7	197.6	157.7	131.1	123.9	108.0	99.8	91.7	85.0	83.5
62.5°	2137.7	842.8	155.1	124.9	109.6	101.4	92.2	86.0	76.3	67.1	65.5
65°	1668.2	515.6	119.8	91.7	88.1	84.0	78.3	72.7	60.9	51.7	50.2
67.5°	1052.2	244.2	85.5	69.1	69.6	67.6	65.0	60.4	51.7	43.5	42.5
70°	463.4	118.3	56.3	52.7	51.7	51.7	53.8	52.2	44.0	36.4	34.8
72.5°	157.7	63.5	42.0	39.9	37.4	36.9	45.1	43.5	35.3	28.2	26.6
75°	82.4	42.5	30.7	28.7	22.5	27.1	35.8	33.8	25.1	18.4	16.9
77.5°	53.8	30.2	21.0	18.4	12.8	17.9	26.6	23.6	14.8	9.2	8.2
80°	33.8	20.0	12.3	8.7	6.1	9.7	14.3	10.2	5.6	2.0	1.5
82.5°	17.9	10.2	4.6	3.1	2.6	3.1	3.6	2.6	1.0	0.0	0.0
85°	7.2	3.6	1.5	1.0	0.5	0.0	1.0	0.5	0.0	0.0	0.0
87.5°	2.6	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)