

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: P884678

Luminaire Tested: **NAV-SB5C-835-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884678  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5C-835-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

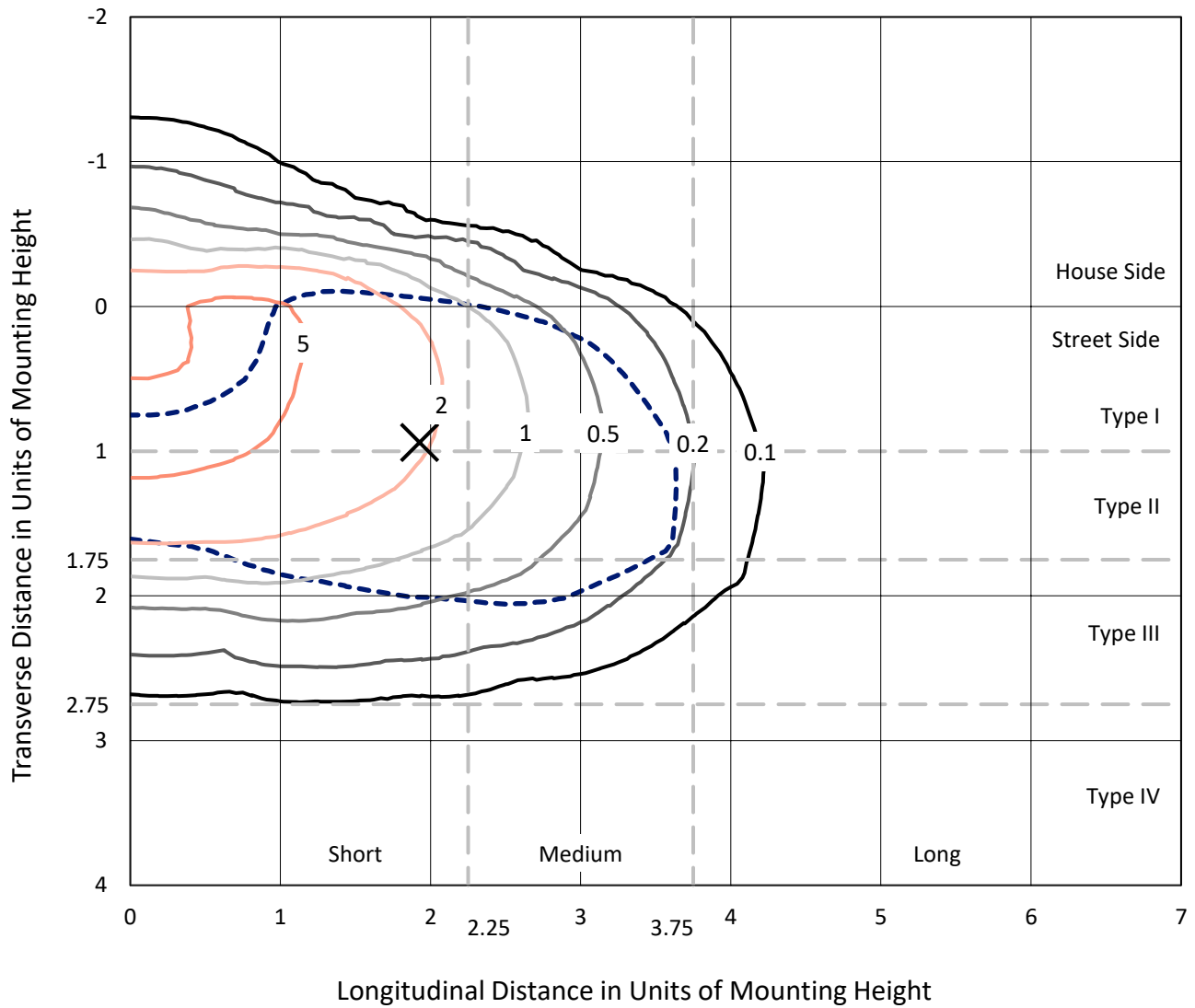
Lumens per Lamp: N/A  
Luminaire Lumens: 25147 lumens  
Efficiency: N/A  
Efficacy: 100.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 249.5  
Input Voltage (V): 120.0  
Input Current (Ain): 2.116  
Voltage Rise (V): NR  
Power Factor: 0.996  
Total Harmonic Distortion (THDi): 7.885  
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

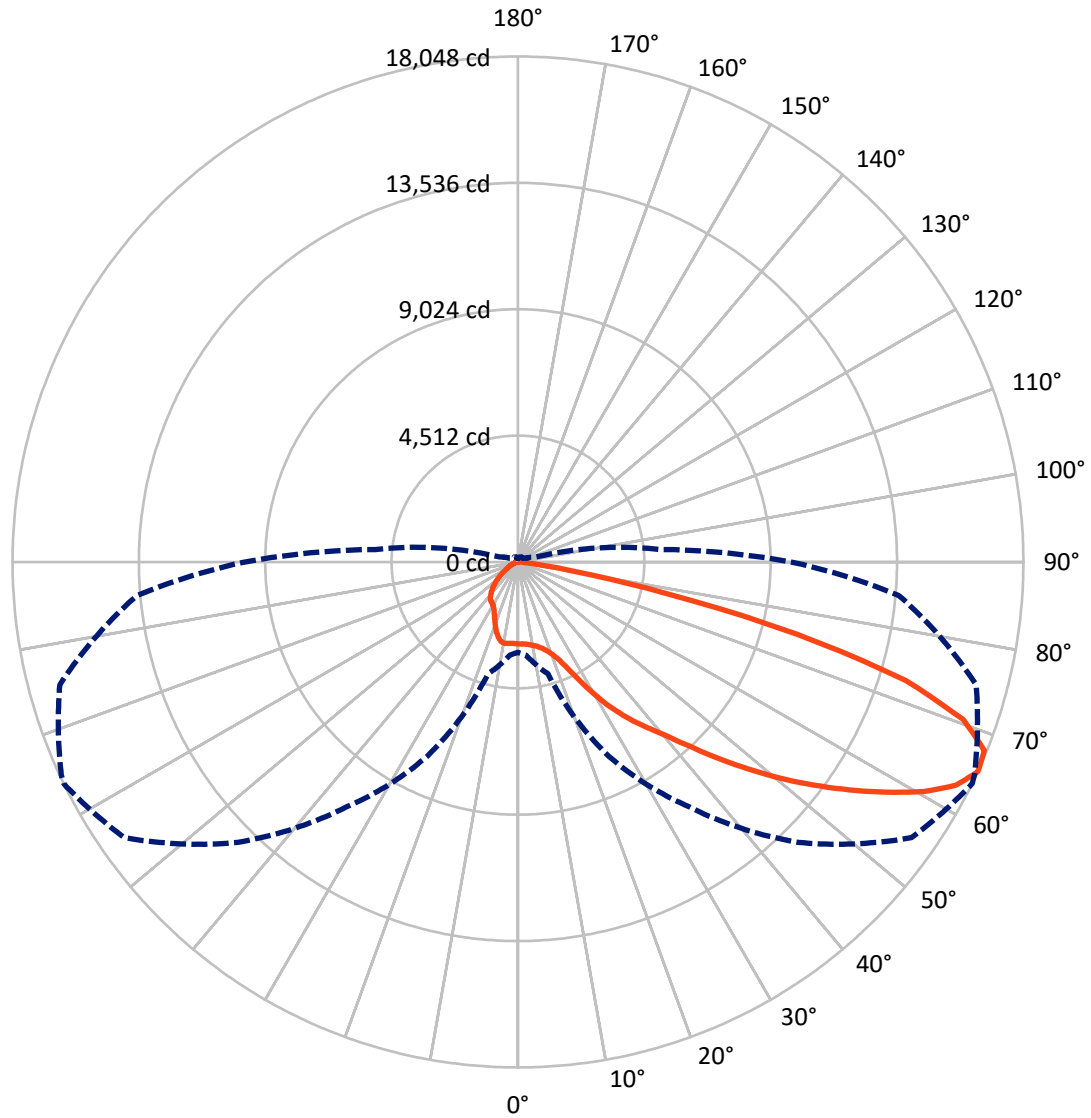
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3362.9	0.0	3362.9
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	21784.1	0.0	21784.1
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	25147.0	0.0	25147.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	269.8	1.1
10°-20°	731.9	2.9
20°-30°	1386.9	5.5
30°-40°	2806.4	11.2
40°-50°	4780.8	19.0
50°-60°	6501.5	25.9
60°-70°	6105.2	24.3
70°-80°	2446.0	9.7
80°-90°	118.5	0.5
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°	25147.0	100.0
0°-180°	25147.0	100.0

**Coefficient of Utilization**



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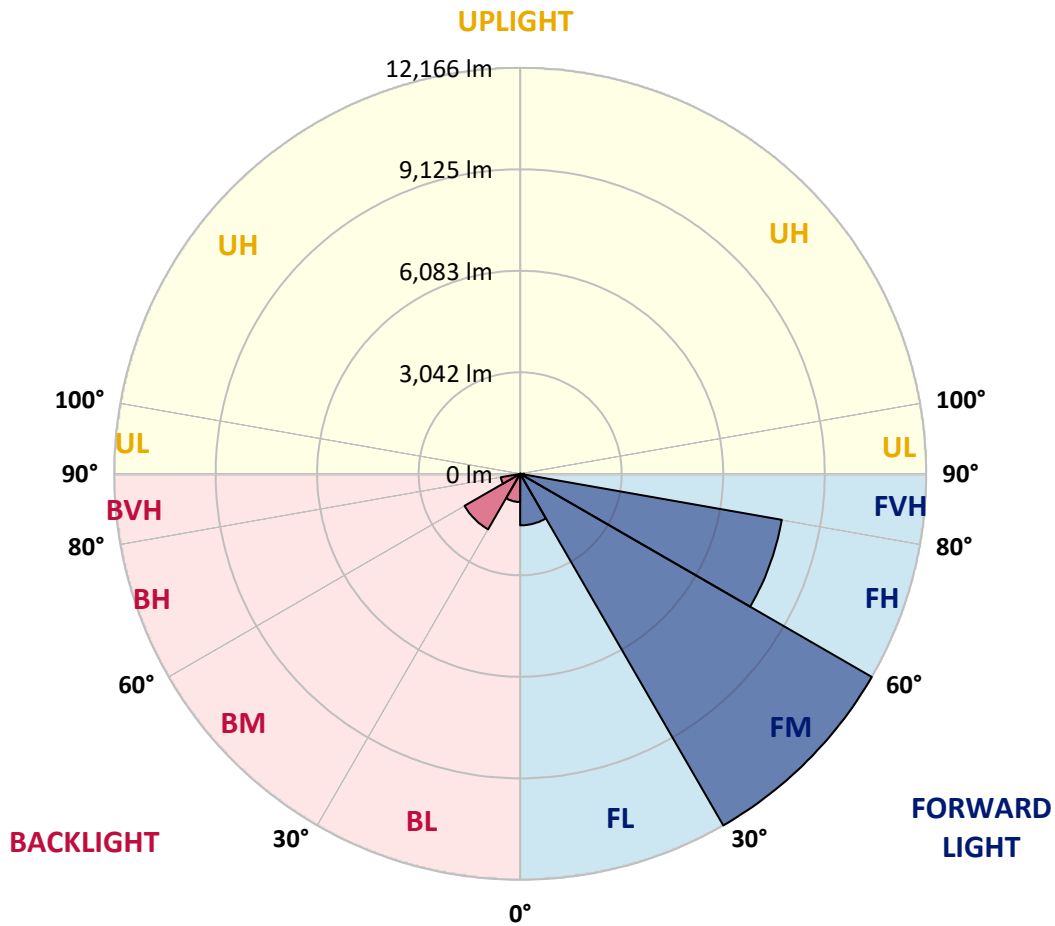
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1544.3	6.1			
FM (30°-60°)	12166.1	48.4			
FH (60°-80°)	7961.0	31.7			G4/12000
FVH (80°-90°)	112.7	0.4			G2/225
BL (0°-30°)	844.3	3.4	B2/1000		
BM (30°-60°)	1922.6	7.6	B2/2500		
BH (60°-80°)	590.2	2.3	B2/1000		G2/1000
BVH (80°-90°)	5.8	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	2924.9	2924.9	2924.9	2924.9	2924.9	2924.9	2924.9	2924.9	2924.9	2924.9	2924.9
2.5°	2914.7	2935.0	2929.9	2924.9	2923.2	2926.5	2928.2	2926.5	2926.5	2926.5	2928.2
5°	2859.1	2876.0	2876.0	2887.8	2904.6	2924.9	2940.0	2943.4	2946.8	2951.8	2950.1
7.5°	2752.9	2766.4	2776.5	2815.3	2857.4	2911.4	2956.9	2980.5	2983.9	3002.4	3009.1
10°	2680.4	2697.3	2714.1	2754.6	2815.3	2896.2	2973.7	3031.1	3039.5	3083.3	3103.6
12.5°	2677.0	2693.9	2715.8	2759.6	2830.5	2916.4	3010.8	3093.4	3108.6	3172.7	3214.8
15°	2712.4	2732.7	2752.9	2806.9	2882.7	2987.2	3088.4	3191.2	3206.4	3297.4	3342.9
17.5°	2784.9	2811.9	2827.1	2881.0	2961.9	3078.3	3211.4	3329.4	3342.9	3449.1	3506.5
20°	2928.2	2960.3	2965.3	3009.1	3088.4	3213.1	3371.6	3518.3	3535.1	3656.5	3720.6
22.5°	3224.9	3270.4	3230.0	3251.9	3322.7	3447.5	3619.4	3804.8	3828.4	3966.7	4024.0
25°	3747.5	3811.6	3707.1	3670.0	3700.3	3830.1	4045.9	4280.2	4307.2	4418.5	4447.1
27.5°	4774.2	4691.6	4533.1	4378.0	4287.0	4361.2	4603.9	4893.9	4927.6	5035.5	5001.8
30°	5902.0	5829.5	5615.4	5271.5	5055.7	5043.9	5268.1	5591.8	5630.6	5733.4	5630.6
32.5°	7031.5	6962.3	6729.7	6306.6	5932.3	5746.9	5902.0	6261.0	6281.3	6347.0	6195.3
35°	8142.4	8071.6	7839.0	7405.7	6945.5	6524.0	6493.7	6898.3	6905.0	6974.1	6748.2
37.5°	9260.1	9201.1	8953.3	8528.4	8075.0	7493.4	7211.8	7501.8	7510.2	7577.7	7343.3
40°	10057.5	10082.7	9912.5	9583.8	9194.3	8558.8	8017.6	8144.1	8093.5	8206.5	8066.5
42.5°	10741.9	10792.5	10644.1	10478.9	10253.0	9693.3	9015.6	8993.7	8912.8	8973.5	8828.5
45°	11333.6	11375.8	11242.6	11203.8	11198.7	10806.0	10106.4	9974.9	9861.9	9850.1	9676.5
47.5°	11551.1	11632.0	11689.3	11819.1	12072.0	11906.8	11234.1	11030.2	10903.7	10811.0	10536.2
50°	11633.7	11719.7	11915.2	12292.8	12891.3	12962.1	12356.9	12127.6	11972.5	11803.9	11399.4
52.5°	11522.4	11675.8	11938.8	12574.4	13442.5	13808.4	13434.1	13233.5	13056.5	12781.7	12181.6
55°	10866.6	11020.1	11557.8	12571.0	13717.3	14401.8	14452.3	14363.0	14164.1	13730.8	12813.7
57.5°	9484.3	9711.9	10563.2	12142.8	13712.3	14912.6	15450.3	15514.4	15291.9	14671.5	13311.1
60°	7569.2	7877.7	8916.2	11193.7	13289.1	15189.0	16325.3	16645.6	16409.5	15598.7	13714.0
62.5°	5281.6	5639.0	6621.8	9706.8	12321.5	14990.1	16964.2	17555.9	17377.2	16428.1	13869.0
65°	3221.6	3336.2	4128.5	7638.3	10676.2	14157.3	17161.4	18048.1	17989.1	16935.5	13639.8
67.5°	2146.0	2242.1	2469.7	5237.8	8287.4	12493.4	16689.4	17962.2	17979.0	16852.9	12800.3
70°	1293.0	1375.6	1524.0	3046.2	5370.9	9888.9	15227.8	16866.4	16964.2	15748.7	11208.9
72.5°	532.7	588.3	723.2	1380.7	2781.6	6276.2	12125.9	14481.0	14708.6	13241.9	8602.6
75°	301.8	330.4	424.8	692.9	1207.0	2924.9	7345.0	10280.0	10615.5	9126.9	5175.4
77.5°	200.6	214.1	274.8	448.4	679.4	998.0	3139.0	5355.8	5996.4	4984.9	2240.4
80°	134.9	146.7	188.8	300.1	441.7	428.2	999.7	1984.2	2441.0	1712.8	546.2
82.5°	91.0	92.7	134.9	197.2	279.8	207.4	295.0	617.0	775.5	495.6	207.4
85°	52.3	50.6	99.5	114.6	124.7	86.0	89.3	185.4	242.8	209.0	118.0
87.5°	6.7	10.1	38.8	30.3	16.9	18.5	18.5	32.0	47.2	50.6	25.3
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°	2924.9	2924.9	2924.9	2924.9	2924.9	2924.9	2924.9	2924.9	2924.9	2924.9	2924.9
2.5°	2928.2	2926.5	2921.5	2916.4	2904.6	2897.9	2901.3	2897.9	2896.2	2897.9	2904.6
5°	2950.1	2945.1	2931.6	2914.7	2891.1	2862.5	2843.9	2817.0	2791.7	2776.5	2779.9
7.5°	3009.1	3004.1	2985.5	2938.3	2862.5	2742.8	2633.2	2537.1	2464.6	2422.5	2424.2
10°	3103.6	3095.1	3066.5	2961.9	2763.0	2501.7	2284.3	2103.9	1985.9	1930.2	1925.2
12.5°	3214.8	3204.7	3154.1	2940.0	2574.2	2166.2	1866.2	1665.6	1556.0	1507.1	1502.0
15°	3346.3	3332.8	3233.4	2835.5	2299.4	1795.4	1520.6	1370.6	1299.7	1255.9	1257.6
17.5°	3509.8	3486.2	3292.4	2678.7	2001.0	1512.2	1308.2	1195.2	1132.9	1090.7	1087.3
20°	3722.2	3683.5	3339.6	2491.6	1726.3	1333.5	1164.9	1070.5	1023.3	986.2	979.4
22.5°	4018.9	3963.3	3396.9	2289.3	1532.4	1210.4	1058.7	989.6	950.8	908.6	901.9
25°	4386.4	4320.7	3467.7	2102.2	1399.2	1104.2	981.1	923.8	878.3	829.4	824.4
27.5°	4900.6	4782.6	3552.0	1948.8	1284.6	1013.2	910.3	846.3	794.0	753.6	745.1
30°	5473.8	5279.9	3626.1	1856.1	1180.1	928.9	817.6	753.6	704.7	676.0	670.9
32.5°	6016.6	5753.6	3675.0	1815.6	1085.7	832.8	716.5	647.3	610.3	601.8	606.9
35°	6529.1	6181.8	3670.0	1776.8	1001.4	736.7	617.0	546.2	517.5	522.6	522.6
37.5°	7119.1	6638.7	3634.6	1716.1	932.2	649.0	531.0	468.7	443.4	445.1	451.8
40°	7805.2	7166.3	3612.7	1601.5	856.4	568.1	460.2	409.6	391.1	384.4	382.7
42.5°	8536.9	7677.1	3616.0	1471.7	762.0	495.6	411.3	369.2	352.3	347.3	345.6
45°	9271.9	8164.3	3621.1	1336.8	662.5	440.0	375.9	340.5	330.4	323.7	323.7
47.5°	9963.1	8579.0	3526.7	1191.9	564.7	397.8	347.3	323.7	315.2	306.8	306.8
50°	10607.0	8855.5	3299.1	1023.3	487.2	364.1	325.4	308.5	300.1	291.6	291.6
52.5°	11107.7	8899.3	2923.2	849.6	433.2	338.8	311.9	296.7	286.6	278.2	276.5
55°	11330.2	8624.5	2388.8	687.8	391.1	316.9	298.4	283.2	271.4	263.0	261.3
57.5°	11272.9	8046.3	1862.8	552.9	350.6	295.0	281.5	271.4	257.9	244.4	242.8
60°	10991.4	7272.5	1404.3	460.2	313.6	271.4	263.0	254.6	236.0	215.8	212.4
62.5°	10504.2	6299.8	1001.4	381.0	273.1	244.4	241.1	234.3	207.4	170.3	166.9
65°	9759.1	5118.1	674.3	316.9	234.3	214.1	215.8	204.0	168.6	126.4	123.1
67.5°	8670.1	3742.5	431.6	259.6	195.6	178.7	180.4	173.6	143.3	107.9	102.8
70°	7282.6	2478.1	281.5	197.2	156.8	138.2	148.4	150.0	121.4	87.7	84.3
72.5°	5338.9	1463.3	197.2	146.7	114.6	96.1	121.4	124.7	97.8	65.7	62.4
75°	3042.9	694.5	148.4	106.2	70.8	67.4	94.4	94.4	67.4	43.8	40.5
77.5°	1277.8	290.0	104.5	69.1	40.5	38.8	64.1	59.0	33.7	20.2	20.2
80°	369.2	129.8	55.6	33.7	16.9	15.2	25.3	18.5	8.4	3.4	3.4
82.5°	145.0	57.3	21.9	13.5	6.7	6.7	3.4	0.0	0.0	0.0	0.0
85°	86.0	23.6	10.1	5.1	1.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	21.9	5.1	3.4	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)