

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: P885180

Luminaire Tested: **NAV-SB6B-830-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P885180  
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-SB6B-830-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

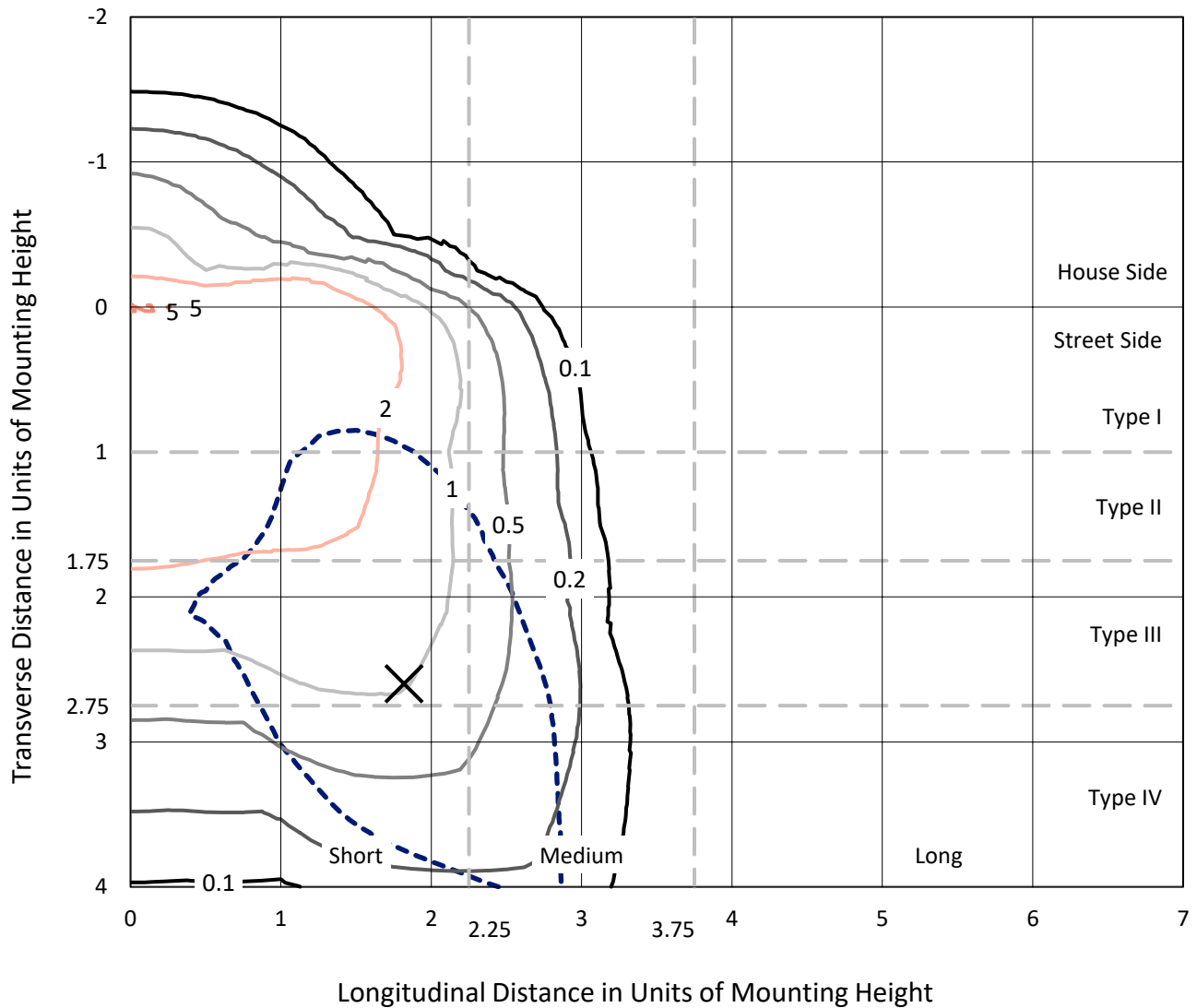
Lumens per Lamp: N/A  
Luminaire Lumens: 22643 lumens  
Efficiency: N/A  
Efficacy: 102.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 220.4  
Input Voltage (V): 120.0  
Input Current (Ain): 1.838  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 8.657  
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

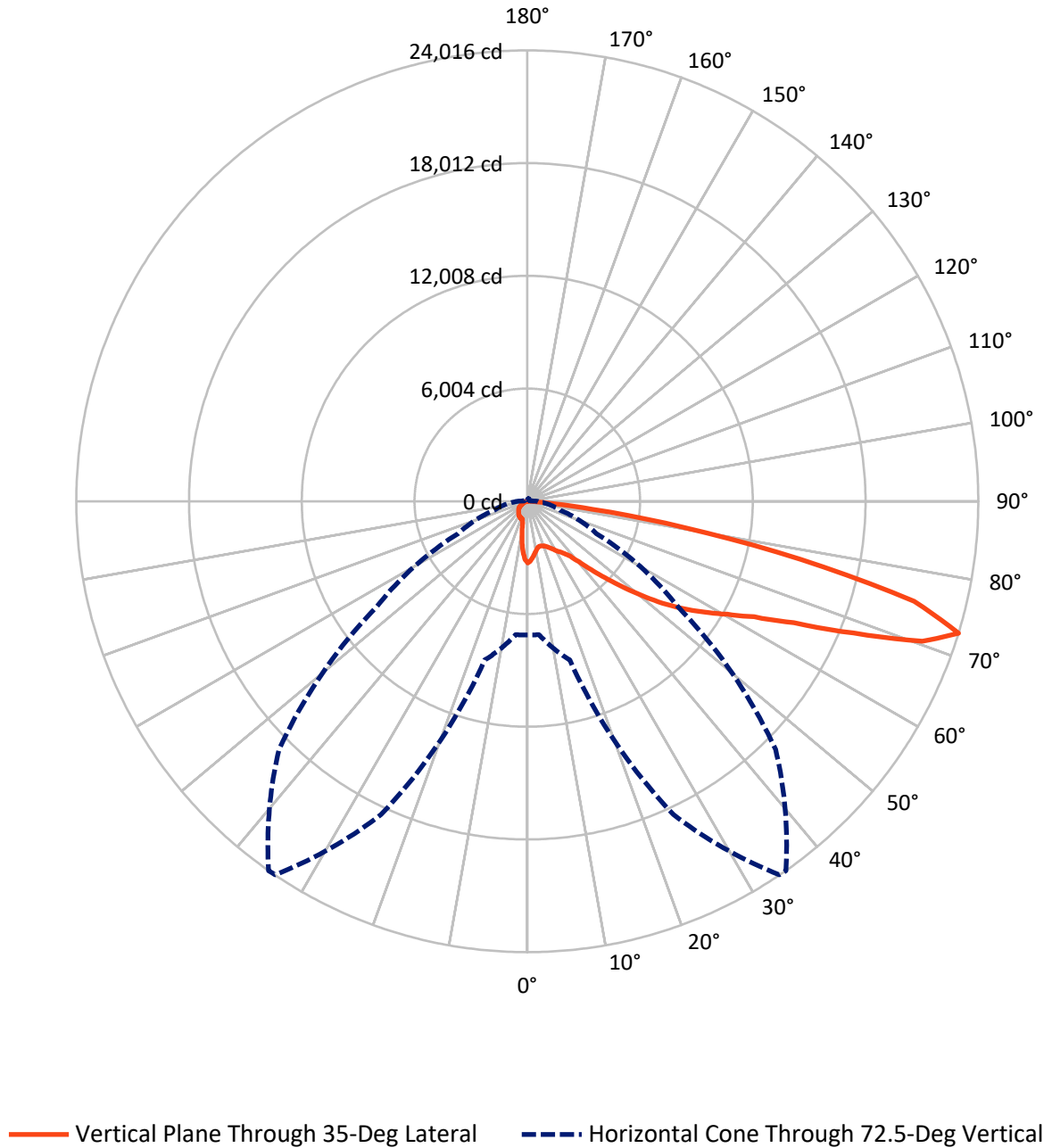
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2548.4	0.0	2548.4
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	20094.6	0.0	20094.6
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	22643.0	0.0	22643.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	269.7	1.2
10°-20°	630.9	2.8
20°-30°	1024.8	4.5
30°-40°	1709.9	7.6
40°-50°	3235.2	14.3
50°-60°	5140.7	22.7
60°-70°	6359.4	28.1
70°-80°	3953.0	17.5
80°-90°	319.5	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°	22643.0	100.0
0°-180°	22643.0	100.0



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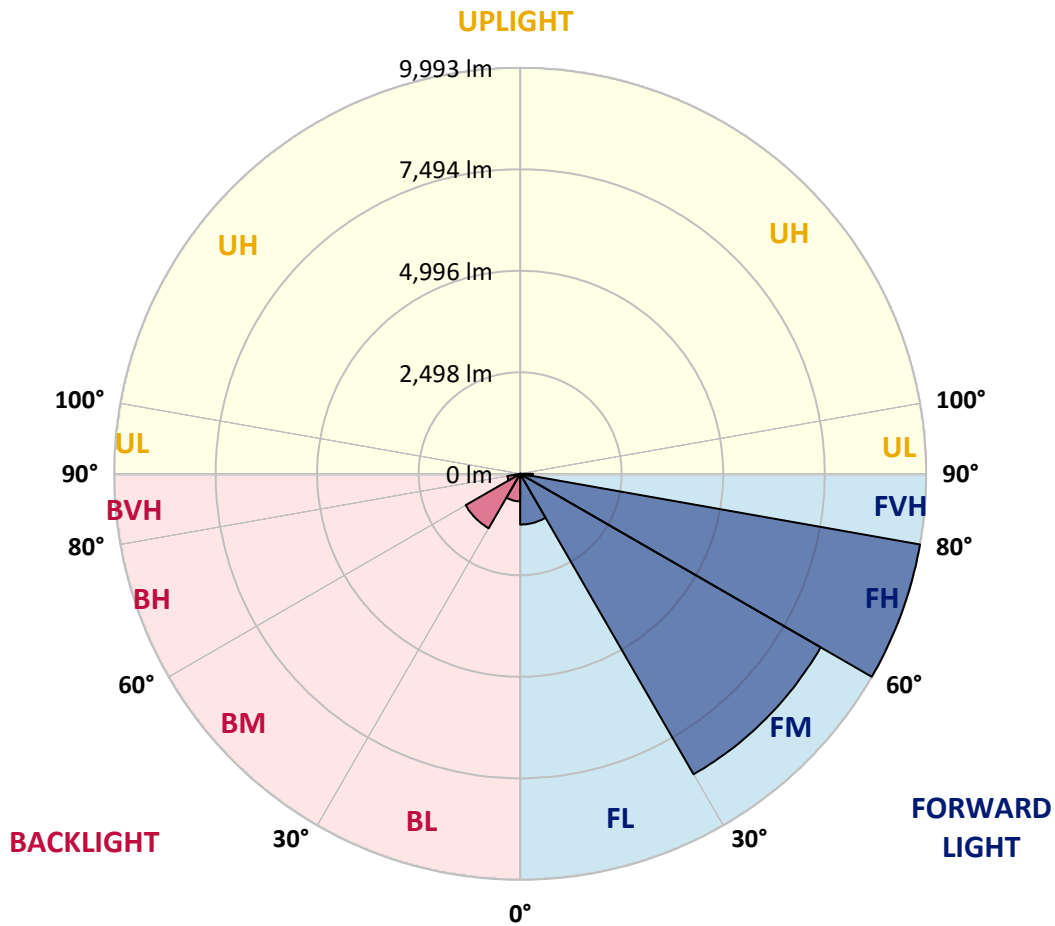
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1248.2	5.5			
FM (30°-60°)	8538.7	37.7			
FH (60°-80°)	9992.6	44.1			G4/12000
FVH (80°-90°)	315.1	1.4			G3/500
BL (0°-30°)	677.2	3.0	B2/1000		
BM (30°-60°)	1547.1	6.8	B2/2500		
BH (60°-80°)	319.8	1.4	B1/500		G1/500
BVH (80°-90°)	4.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

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

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	3281.7	3281.7	3281.7	3281.7	3281.7	3281.7	3281.7	3281.7	3281.7	3281.7	3281.7
2.5°	3135.7	3162.3	3167.3	3175.5	3175.5	3185.5	3202.1	3225.3	3263.5	3283.4	3296.7
5°	2890.2	2910.1	2935.0	2954.9	2993.0	2998.0	3062.7	3125.8	3213.7	3280.1	3326.5
7.5°	2643.0	2666.2	2699.4	2747.5	2797.3	2812.2	2910.1	3016.3	3155.6	3280.1	3358.0
10°	2468.8	2470.4	2500.3	2548.4	2628.0	2646.3	2765.7	2916.7	3090.9	3260.2	3387.9
12.5°	2370.9	2382.5	2395.8	2432.3	2508.6	2520.2	2647.9	2825.5	3026.2	3248.5	3422.8
15°	2370.9	2379.2	2387.5	2405.7	2467.1	2477.1	2589.9	2767.4	2993.0	3253.5	3479.2
17.5°	2395.8	2409.0	2402.4	2424.0	2488.7	2495.3	2594.9	2750.8	2991.4	3285.0	3565.4
20°	2455.5	2465.4	2452.2	2465.4	2530.2	2543.4	2646.3	2782.3	3019.6	3339.8	3673.3
22.5°	2550.1	2555.0	2523.5	2533.5	2599.8	2616.4	2735.9	2871.9	3087.6	3427.7	3817.6
25°	2669.5	2679.5	2631.4	2643.0	2706.0	2725.9	2863.6	3006.3	3195.5	3548.8	4001.8
27.5°	2807.2	2812.2	2770.7	2769.1	2850.4	2878.6	3017.9	3172.2	3339.8	3701.5	4234.1
30°	2964.8	2979.8	2940.0	2933.3	3036.2	3059.4	3197.1	3376.3	3552.2	3930.4	4564.2
32.5°	3089.3	3100.9	3077.7	3094.2	3198.8	3217.0	3414.5	3665.0	3885.6	4255.6	5013.8
35°	3268.5	3275.1	3222.0	3251.9	3371.3	3417.8	3711.4	4069.8	4305.4	4663.8	5601.2
37.5°	3917.2	3917.2	3691.5	3543.9	3658.3	3699.8	4117.9	4579.2	4823.0	5211.3	6341.1
40°	4814.8	4799.8	4469.7	4167.7	4152.8	4234.1	4697.0	5221.2	5491.7	5868.3	7174.0
42.5°	5772.1	5748.8	5299.2	5000.6	4950.8	4979.0	5365.6	6012.6	6288.0	6669.6	8069.9
45°	6621.5	6614.9	6203.4	5801.9	5712.3	5801.9	6200.1	6938.4	7135.9	7537.4	8964.2
47.5°	7333.3	7333.3	7033.0	6770.8	6724.4	6777.5	7330.0	7965.4	7947.2	8461.5	9835.2
50°	8152.9	8146.3	7860.9	7748.1	7796.2	7870.8	8630.7	9047.2	8786.7	9369.0	10613.4
52.5°	8726.9	8766.8	8668.9	8650.6	8896.2	9025.6	9951.4	10105.7	9538.3	10230.1	11195.7
55°	9181.5	9228.0	9340.8	9468.6	9941.4	10110.6	11230.6	11109.4	10167.1	10976.7	11530.9
57.5°	9825.3	9758.9	9933.1	10185.3	10950.2	11154.2	12469.9	12056.8	10673.1	11582.3	11567.4
60°	10606.7	10616.7	10646.5	10965.1	11957.2	12219.4	13691.0	12952.7	10998.3	11953.9	11162.5
62.5°	11545.8	11560.7	11622.1	12111.5	13309.4	13556.6	14991.8	13686.0	11147.6	11849.4	10117.3
65°	11481.1	11544.1	12229.3	13903.4	15365.1	15609.0	16509.9	14200.4	10922.0	10893.8	8237.5
67.5°	10459.1	10561.9	11708.4	16043.6	18464.3	18736.4	18344.8	14301.6	9948.1	8471.4	5373.9
70°	9118.5	9155.0	10533.7	17968.2	22053.0	22328.4	19987.4	13188.3	7549.0	4725.2	2407.4
72.5°	7120.9	7129.2	8746.9	18414.5	24000.8	24015.7	18698.2	9790.4	4059.9	1815.1	836.2
75°	5086.8	5037.1	5858.3	14933.7	21115.6	21284.8	14017.9	4592.4	1551.3	857.8	416.4
77.5°	2727.6	2782.3	3314.9	8856.4	14586.9	14875.6	7648.5	1324.0	789.7	584.0	275.4
80°	842.8	889.3	1358.8	4054.9	8262.4	8436.6	2835.4	589.0	550.8	416.4	180.8
82.5°	265.5	275.4	633.8	1703.9	3429.4	3509.0	821.3	333.5	376.6	275.4	106.2
85°	76.3	78.0	282.0	635.4	847.8	864.4	230.6	129.4	215.7	170.9	54.8
87.5°	8.3	26.5	106.2	106.2	74.7	73.0	24.9	28.2	61.4	21.6	10.0
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°	3281.7	3281.7	3281.7	3281.7	3281.7	3281.7	3281.7	3281.7	3281.7	3281.7	3281.7
2.5°	3288.4	3290.0	3268.5	3232.0	3192.1	3159.0	3117.5	3084.3	3061.1	3054.4	3066.0
5°	3311.6	3300.0	3238.6	3127.4	2994.7	2880.2	2752.5	2651.3	2584.9	2556.7	2566.7
7.5°	3346.4	3313.3	3178.9	2959.9	2706.0	2480.4	2251.4	2073.9	1961.1	1904.7	1913.0
10°	3376.3	3309.9	3079.3	2717.6	2329.4	1987.6	1679.0	1465.0	1345.5	1289.1	1290.8
12.5°	3404.5	3308.3	2949.9	2430.6	1904.7	1486.6	1199.5	1093.4	1060.2	1048.6	1045.2
15°	3457.6	3313.3	2787.3	2102.1	1481.6	1123.2	1018.7	1017.0	1023.7	1020.4	1018.7
17.5°	3530.6	3318.2	2603.2	1753.7	1143.1	990.5	985.5	1000.4	1010.4	1005.4	1003.8
20°	3625.2	3338.1	2407.4	1408.6	982.2	957.3	968.9	982.2	990.5	982.2	980.5
22.5°	3757.9	3373.0	2193.4	1131.5	930.8	937.4	947.4	962.3	970.6	959.0	957.3
25°	3920.5	3427.7	1982.6	983.9	905.9	914.2	929.1	945.7	955.7	944.0	942.4
27.5°	4131.2	3515.7	1788.5	950.7	881.0	886.0	907.5	932.4	945.7	930.8	930.8
30°	4436.5	3660.0	1621.0	965.6	866.1	854.4	884.3	919.1	934.1	920.8	919.1
32.5°	4841.3	3864.1	1518.1	988.8	859.4	817.9	846.1	890.9	915.8	907.5	907.5
35°	5372.2	4174.3	1478.3	1015.4	854.4	779.8	799.7	847.8	890.9	899.2	899.2
37.5°	6016.0	4605.7	1489.9	1027.0	839.5	748.3	758.2	799.7	856.1	882.6	889.3
40°	6747.6	5108.4	1556.3	1015.4	822.9	721.7	723.4	754.9	804.7	844.5	857.8
42.5°	7502.5	5695.7	1679.0	972.2	808.0	698.5	693.5	715.1	748.3	776.5	788.1
45°	8220.9	6299.7	1800.1	912.5	789.7	675.3	663.6	671.9	678.6	690.2	696.8
47.5°	8848.1	6724.4	1765.3	857.8	764.9	648.7	628.8	625.5	605.6	603.9	602.3
50°	9281.1	6817.3	1567.9	803.0	728.4	618.8	587.3	567.4	532.6	516.0	517.6
52.5°	9418.8	6450.6	1280.8	748.3	668.6	579.0	534.2	502.7	459.6	444.6	443.0
55°	9236.3	5732.2	1023.7	681.9	585.7	525.9	476.2	434.7	399.8	381.6	381.6
57.5°	8790.0	4818.1	809.6	603.9	497.7	466.2	416.4	375.0	345.1	326.8	323.5
60°	8050.0	3825.9	640.4	511.0	424.7	401.5	350.1	323.5	297.0	275.4	270.4
62.5°	6926.8	2730.9	502.7	404.8	355.1	328.5	298.6	278.7	247.2	217.3	212.4
65°	5405.4	1670.7	388.2	297.0	285.4	272.1	253.8	235.6	197.4	167.6	162.6
67.5°	3409.5	791.4	277.1	224.0	225.6	219.0	210.7	195.8	167.6	141.0	137.7
70°	1501.5	383.3	182.5	170.9	167.6	167.6	174.2	169.2	142.7	117.8	112.8
72.5°	511.0	205.7	136.0	129.4	121.1	119.5	146.0	141.0	114.5	91.3	86.3
75°	267.1	137.7	99.5	92.9	73.0	87.9	116.1	109.5	81.3	59.7	54.8
77.5°	174.2	97.9	68.0	59.7	41.5	58.1	86.3	76.3	48.1	29.9	26.5
80°	109.5	64.7	39.8	28.2	19.9	31.5	46.5	33.2	18.3	6.6	5.0
82.5°	58.1	33.2	14.9	10.0	8.3	10.0	11.6	8.3	3.3	0.0	0.0
85°	23.2	11.6	5.0	3.3	1.7	0.0	3.3	1.7	0.0	0.0	0.0
87.5°	8.3	1.7	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)