

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: McGRAW-EDISON

Report Number: P647411

Luminaire Tested: **GALN-SA4D-835-U-T3R-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P647411
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4D-835-U-T3R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18760.7 lumens
Efficiency: N/A
Efficacy: 76.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

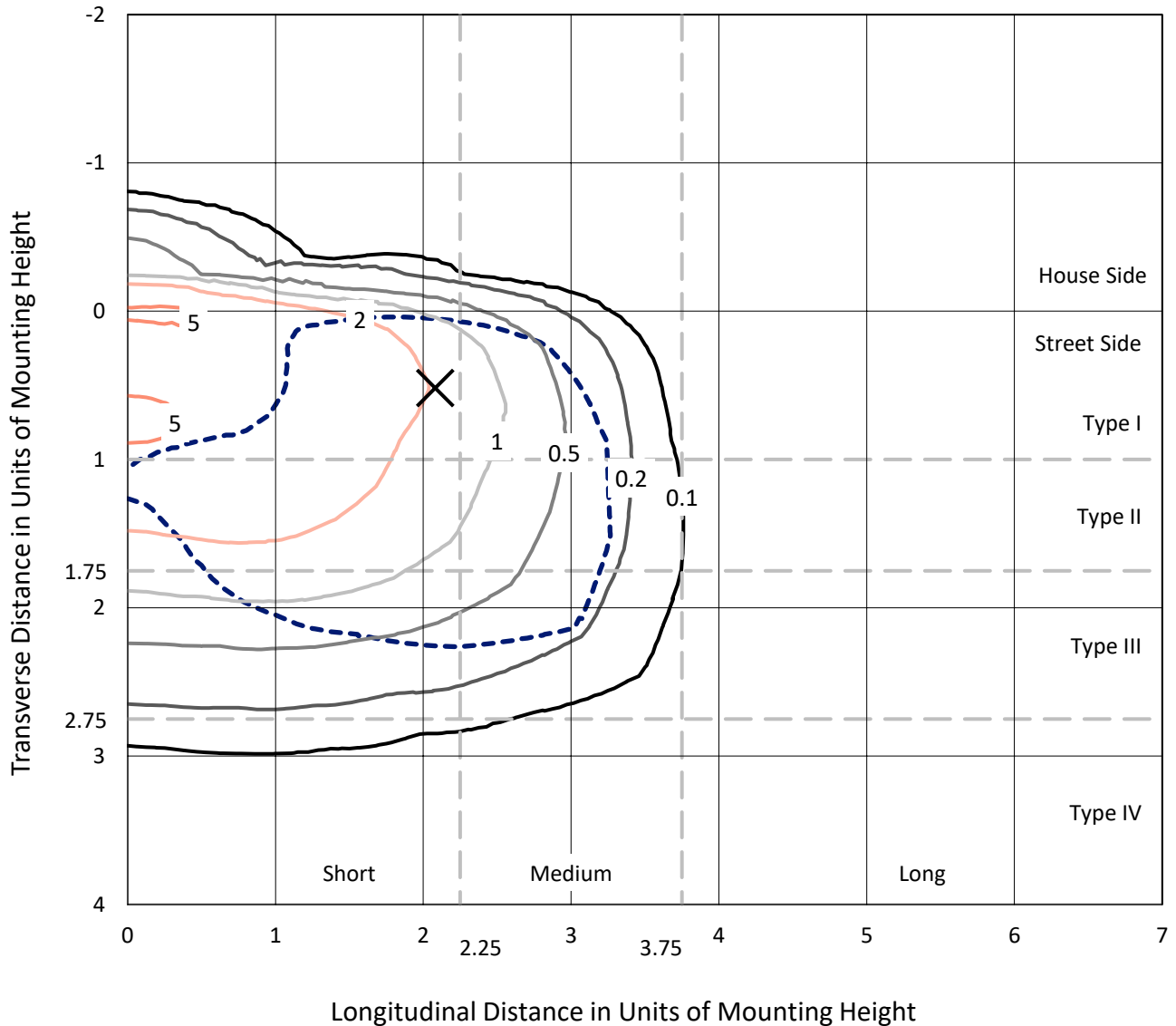
Input Watts (W): 245
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

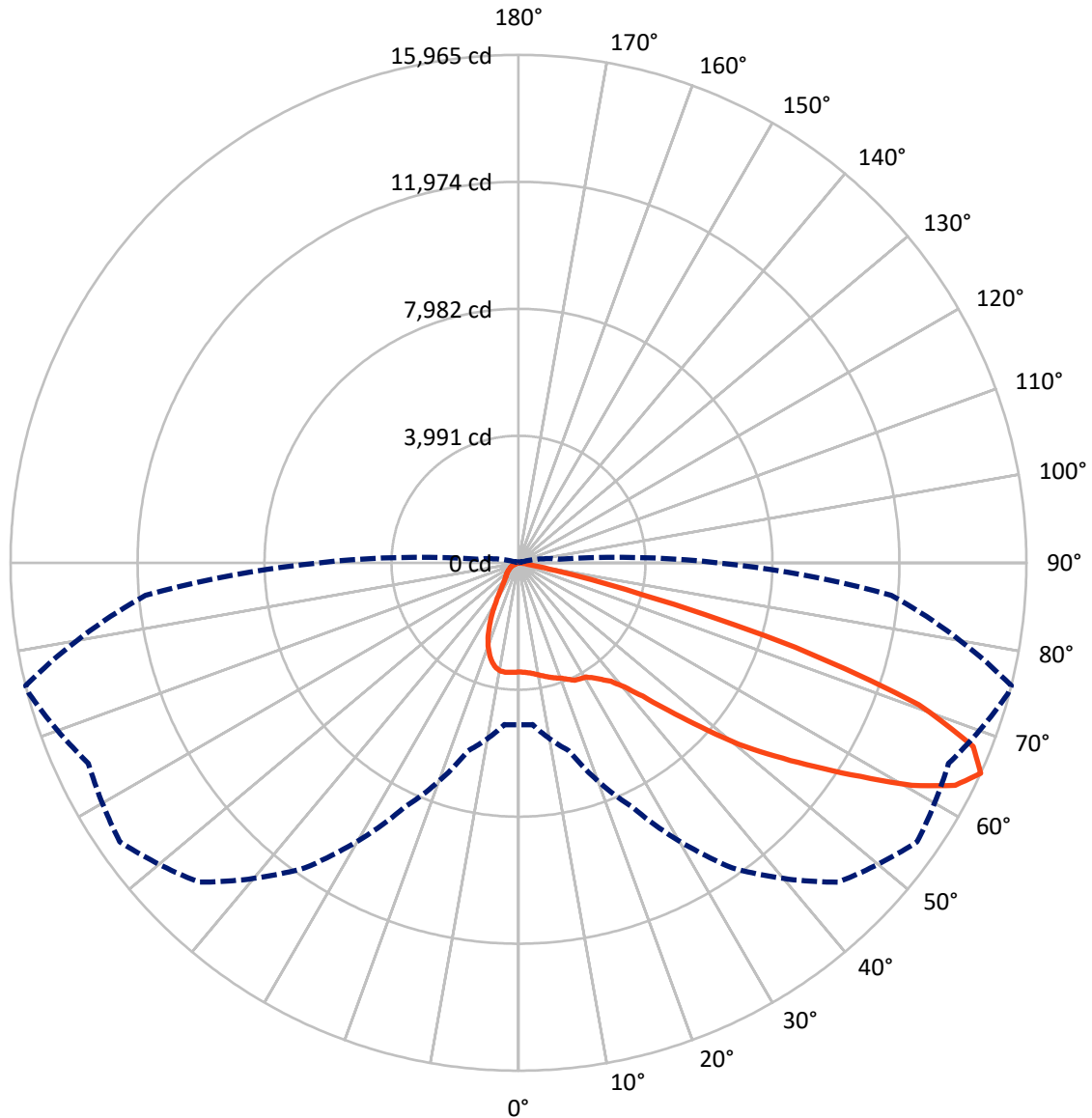
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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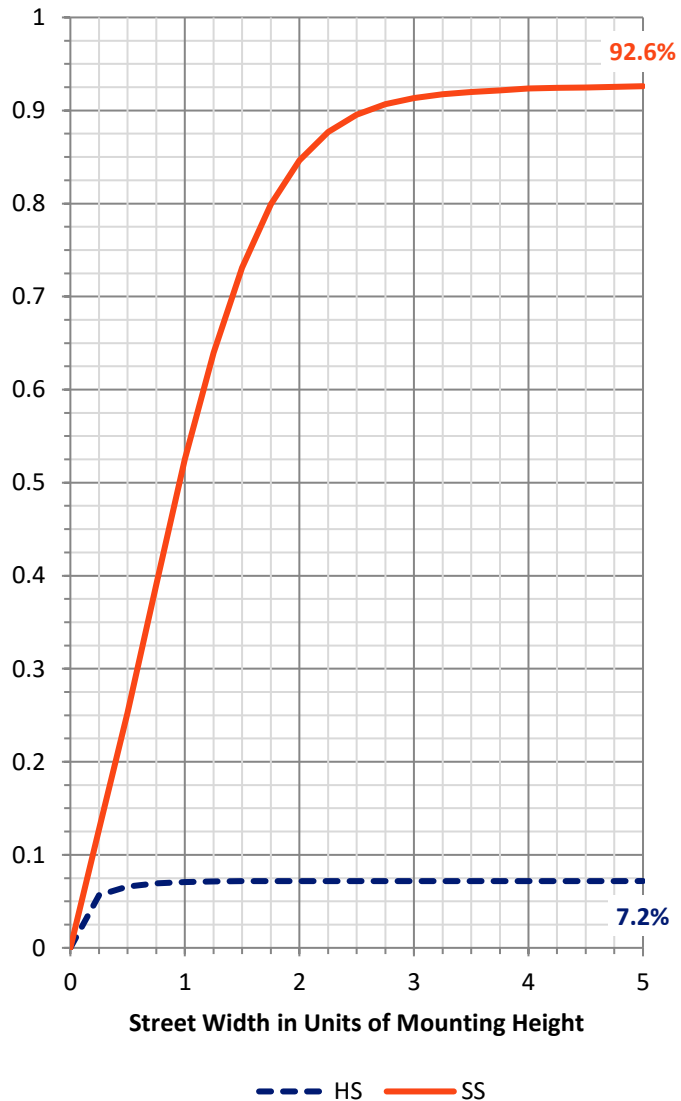
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1354.9	0.0	1354.9
	% Fixture	7.2	0.0	7.2
Street Side	Lumens	17405.8	0.0	17405.8
	% Fixture	92.8	0.0	92.8
Total	Lumens	18760.7	0.0	18760.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	282.7	1.5
10°-20°	629.5	3.4
20°-30°	1014.3	5.4
30°-40°	1763.7	9.4
40°-50°	2914.4	15.5
50°-60°	4502.1	24.0
60°-70°	5497.8	29.3
70°-80°	2086.5	11.1
80°-90°	69.6	0.4
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°	18760.7	100.0
0°-180°	18760.7	100.0

Coefficient of Utilization



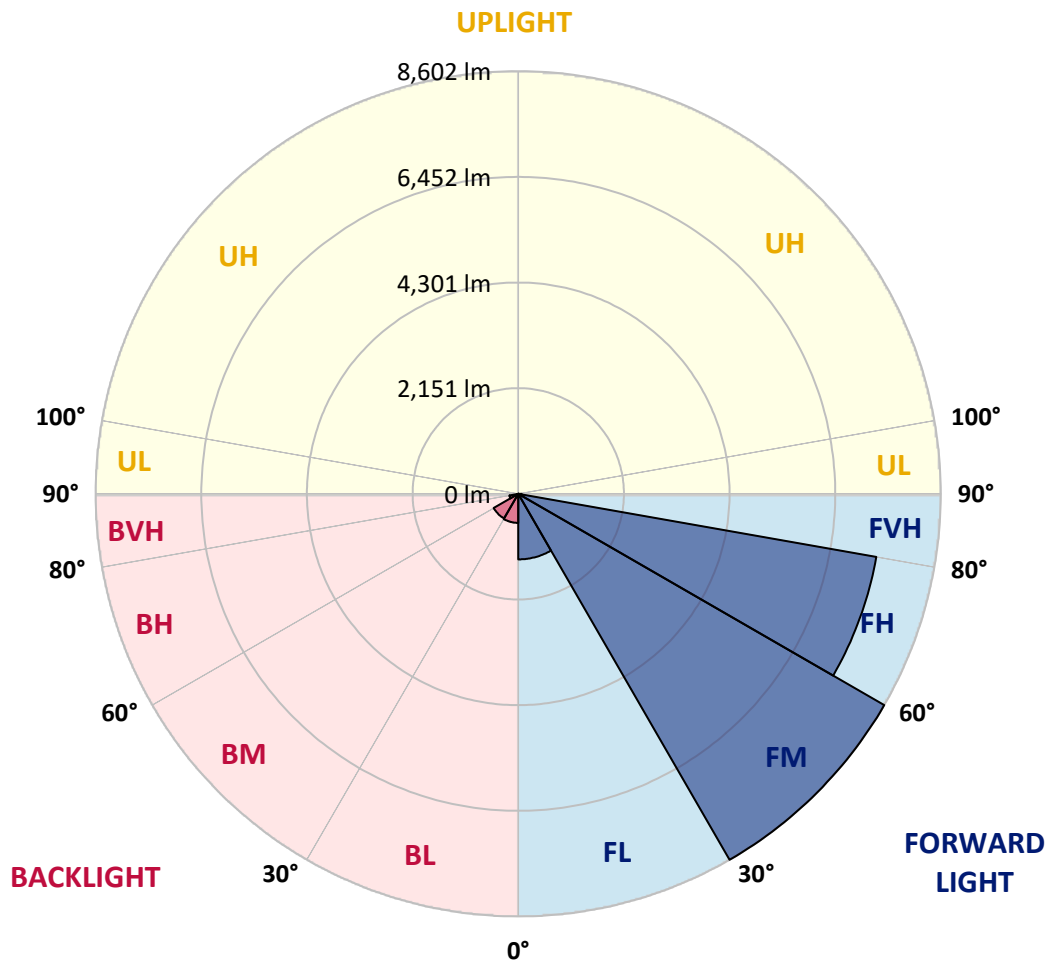
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1334.6	7.1			
FM (30°-60°)	8602.1	45.9			
FH (60°-80°)	7400.4	39.4			G3/7500
FVH (80°-90°)	68.7	0.4			G1/100
BL (0°-30°)	591.9	3.2	B2/1000		
BM (30°-60°)	578.2	3.1	B1/1000		
BH (60°-80°)	183.8	1.0	B1/500		G1/500
BVH (80°-90°)	1.0	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-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3431.9	3431.9	3431.9	3431.9	3431.9	3431.9	3431.9	3431.9	3431.9	3431.9	3431.9
2.5°	3279.6	3280.9	3288.9	3308.7	3339.2	3364.4	3385.5	3420.0	3443.9	3446.5	3454.4
5°	3053.1	3037.2	3053.1	3104.8	3151.1	3221.3	3307.4	3393.5	3470.3	3475.7	3512.7
7.5°	2798.8	2812.1	2837.2	2890.2	2977.6	3084.9	3209.4	3363.1	3508.8	3522.0	3594.8
10°	2540.5	2569.6	2610.7	2691.5	2813.4	2952.5	3122.0	3341.8	3569.7	3588.3	3714.1
12.5°	2302.1	2315.3	2365.7	2474.3	2625.2	2821.3	3055.7	3329.9	3637.3	3659.7	3841.2
15°	2119.3	2136.5	2180.2	2278.2	2446.5	2698.1	3001.5	3325.9	3703.4	3735.2	3968.4
17.5°	2084.8	2095.5	2114.0	2180.2	2327.2	2600.1	2952.5	3324.6	3767.0	3805.5	4086.2
20°	2226.6	2217.3	2198.7	2192.2	2273.0	2524.6	2916.7	3335.3	3828.0	3871.7	4210.7
22.5°	2581.6	2593.5	2484.9	2356.4	2329.9	2512.6	2911.4	3385.5	3924.6	3976.3	4349.9
25°	3335.3	3243.8	3074.3	2767.0	2535.2	2585.5	2971.0	3504.8	4037.2	4094.2	4475.7
27.5°	4168.4	4140.6	3876.9	3371.0	2939.2	2739.2	3077.0	3596.2	4074.3	4132.6	4547.2
30°	4986.9	5020.0	4718.0	4159.1	3526.0	3023.9	3176.3	3630.6	4107.5	4168.4	4638.6
32.5°	5746.0	5785.7	5520.8	4967.1	4217.4	3516.7	3347.2	3764.4	4246.5	4308.8	4790.9
35°	6343.3	6348.6	6148.6	5707.5	4972.4	4115.4	3716.7	3998.9	4434.6	4507.5	4952.6
37.5°	6891.7	6883.7	6649.3	6269.1	5601.6	4710.1	4181.6	4269.1	4649.2	4724.7	5185.7
40°	7298.3	7303.6	7228.1	6870.5	6188.4	5259.8	4549.9	4522.1	5009.5	5127.4	5524.7
42.5°	7569.8	7618.8	7655.9	7474.4	6926.1	5936.6	5115.4	5063.8	5634.7	5732.7	6004.2
45°	7789.8	7877.1	8062.6	8053.3	7634.7	6767.2	5891.6	5785.7	6520.8	6625.4	6614.9
47.5°	7950.0	8038.7	8346.0	8531.5	8301.0	7572.5	6867.8	6776.4	7579.1	7693.1	7289.0
50°	8032.1	8138.1	8530.2	8889.1	8821.5	8348.7	7980.5	7985.7	8857.3	8967.2	8070.5
52.5°	7840.0	7977.8	8628.2	9274.6	9405.7	9091.7	9022.9	9197.7	9995.1	10089.1	8776.5
55°	7226.8	7400.3	8494.4	9603.0	10082.5	9968.6	10207.0	10473.3	11238.9	11299.8	9501.1
57.5°	6838.7	7022.8	8099.7	9882.6	10895.8	11070.7	11448.2	11642.8	12522.4	12677.3	10332.9
60°	6511.5	6655.9	7775.1	9942.1	11722.3	12419.1	12785.9	12987.3	14106.5	14207.2	11248.1
62.5°	5967.2	6132.7	7226.8	9526.2	12138.2	13498.5	14258.8	14168.8	15331.8	15401.9	11809.8
65°	5091.6	5106.2	6114.1	8481.1	11709.1	14199.2	15293.3	14915.8	15917.2	15964.9	11766.1
67.5°	3800.1	3940.5	4703.5	6666.5	9890.5	13600.6	15628.4	14935.7	15547.6	15415.2	10832.3
70°	2447.8	2555.1	3188.2	4622.7	7131.4	11350.1	14517.1	13911.8	13645.6	13351.6	8866.6
72.5°	1129.9	1267.6	1894.2	2641.1	4229.3	8085.1	11784.6	11302.4	9821.6	9095.7	5636.0
75°	492.7	527.2	935.1	1393.4	1982.9	4275.6	7769.9	7016.1	4435.9	4051.8	2255.7
77.5°	300.7	323.2	490.1	747.1	778.9	1629.2	4185.6	3061.1	1371.0	1209.3	611.9
80°	204.0	229.2	356.3	390.7	266.2	454.3	1570.9	817.2	276.9	264.9	131.2
82.5°	99.4	125.8	263.6	218.5	115.3	145.7	457.0	174.8	80.8	75.5	46.4
85°	14.6	25.1	148.4	143.1	51.7	34.5	80.8	43.7	27.8	26.5	21.2
87.5°	0.0	0.0	50.3	22.6	5.3	5.3	9.2	9.2	10.6	9.2	10.6
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°	3431.9	3431.9	3431.9	3431.9	3431.9	3431.9	3431.9	3431.9	3431.9	3431.9	3431.9
2.5°	3458.4	3465.0	3439.9	3404.1	3365.7	3327.3	3273.0	3224.0	3194.8	3212.0	3169.7
5°	3520.7	3515.4	3449.1	3340.5	3196.1	3022.6	2850.4	2703.4	2655.7	2584.2	2576.2
7.5°	3606.7	3592.2	3451.8	3202.8	2876.9	2551.1	2233.2	2022.6	1902.1	1800.0	1802.7
10°	3727.3	3685.0	3421.3	2960.4	2423.9	1932.5	1527.2	1249.0	1128.5	1090.1	1059.6
12.5°	3851.8	3769.7	3336.6	2633.2	1887.5	1320.6	928.5	759.0	684.8	660.9	658.3
15°	3963.1	3833.3	3188.2	2239.8	1372.2	843.8	633.1	577.5	568.2	569.6	568.2
17.5°	4073.0	3883.6	2982.9	1822.6	932.5	605.3	544.4	531.1	535.1	540.4	539.1
20°	4164.4	3894.2	2720.6	1390.8	659.6	531.1	511.3	508.6	512.6	516.5	516.5
22.5°	4263.7	3902.2	2409.4	962.9	539.1	494.1	483.4	483.4	488.7	494.1	495.4
25°	4337.9	3858.5	2037.1	691.4	475.5	458.3	453.0	454.3	459.6	462.3	461.0
27.5°	4349.9	3735.2	1642.4	529.9	431.8	414.6	409.3	414.6	407.9	411.9	409.3
30°	4360.4	3578.9	1242.5	446.4	392.0	365.6	357.6	349.7	344.4	337.8	336.5
32.5°	4393.6	3394.9	907.3	401.4	355.0	325.8	307.3	284.8	267.6	262.2	261.0
35°	4408.1	3173.7	666.3	365.6	321.9	290.1	257.0	225.2	200.0	190.7	197.4
37.5°	4463.7	2959.0	516.5	339.1	292.8	253.0	210.6	170.9	147.0	141.7	144.4
40°	4577.7	2725.9	433.2	316.6	267.6	218.5	166.9	128.5	112.6	107.3	105.9
42.5°	4760.5	2494.2	385.5	295.3	242.4	184.1	131.2	100.7	87.4	83.5	83.5
45°	4983.0	2271.6	352.4	272.9	215.9	148.4	103.3	80.8	72.8	70.2	70.2
47.5°	5275.7	2076.9	324.6	250.3	186.7	117.9	83.5	70.2	64.9	66.2	67.6
50°	5572.4	1932.5	294.0	225.2	153.6	96.7	71.5	62.2	60.9	62.2	62.2
52.5°	5796.2	1847.7	253.0	190.7	120.5	80.8	63.6	58.3	56.9	54.3	54.3
55°	6098.2	1829.2	201.3	155.0	95.4	67.6	56.9	53.0	49.0	46.4	45.0
57.5°	6486.4	1850.4	155.0	120.5	74.2	55.6	50.3	43.7	38.4	33.1	33.1
60°	6727.5	1802.7	120.5	92.7	54.3	45.0	38.4	31.8	25.1	21.2	19.9
62.5°	6650.6	1601.4	95.4	68.9	38.4	33.1	25.1	21.2	14.6	10.6	9.2
65°	6254.5	1292.7	76.8	47.7	27.8	19.9	13.2	13.2	6.7	1.3	0.0
67.5°	5474.4	957.7	60.9	31.8	15.9	9.2	6.7	4.0	0.0	0.0	0.0
70°	4455.8	691.4	47.7	19.9	9.2	6.7	2.7	1.3	0.0	0.0	0.0
72.5°	2829.3	396.0	37.1	11.9	6.7	2.7	0.0	0.0	0.0	0.0	0.0
75°	1094.1	155.0	25.1	7.9	2.7	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	309.9	72.8	14.6	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	80.8	31.8	7.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	38.4	13.2	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	22.6	5.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.6	1.3	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)