

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: P647387

Luminaire Tested: **GALN-SA4D-835-U-SL4-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P647387  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-19)  
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-SL4-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19710.5 lumens  
Efficiency: N/A  
Efficacy: 80.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G4

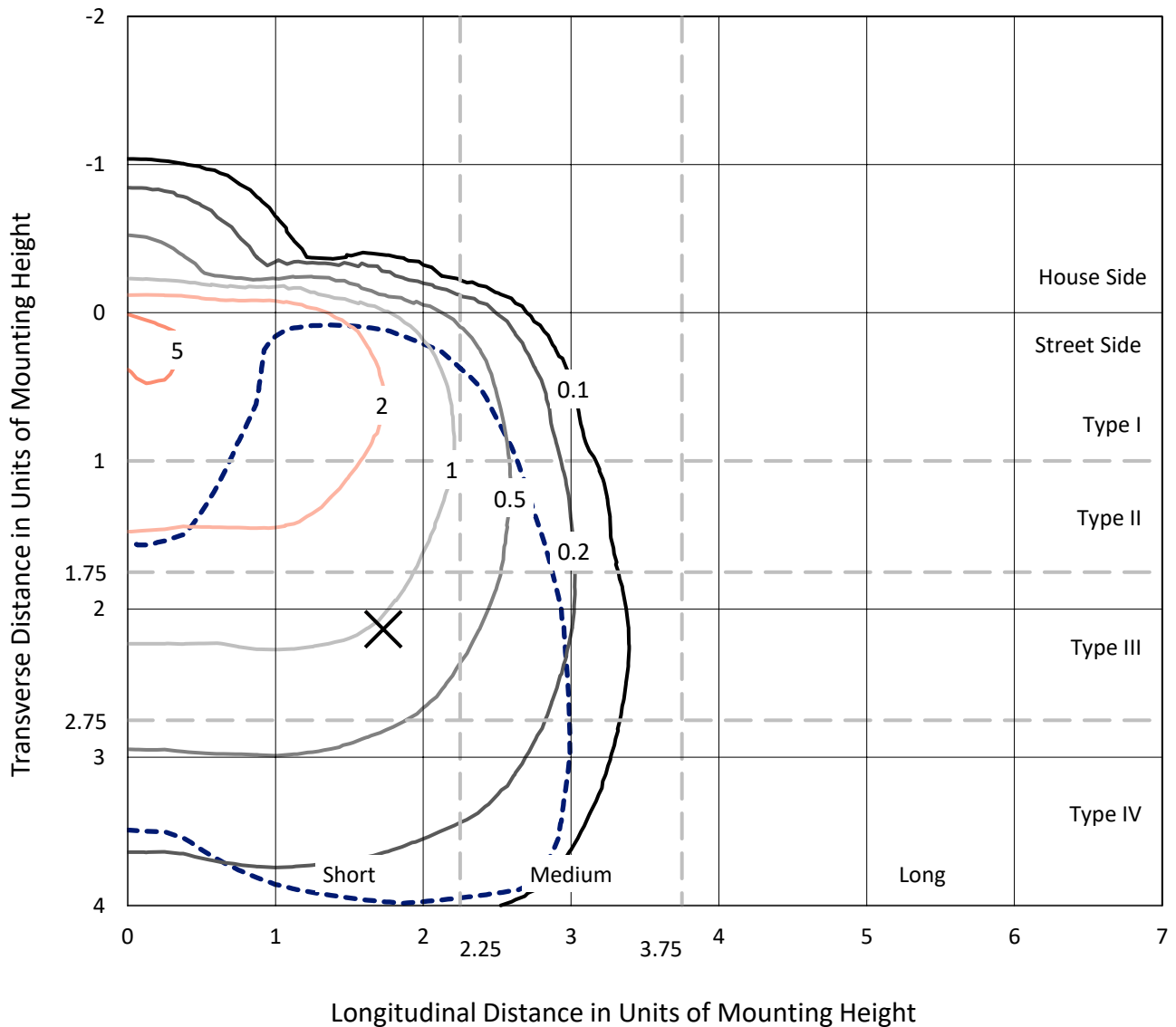
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

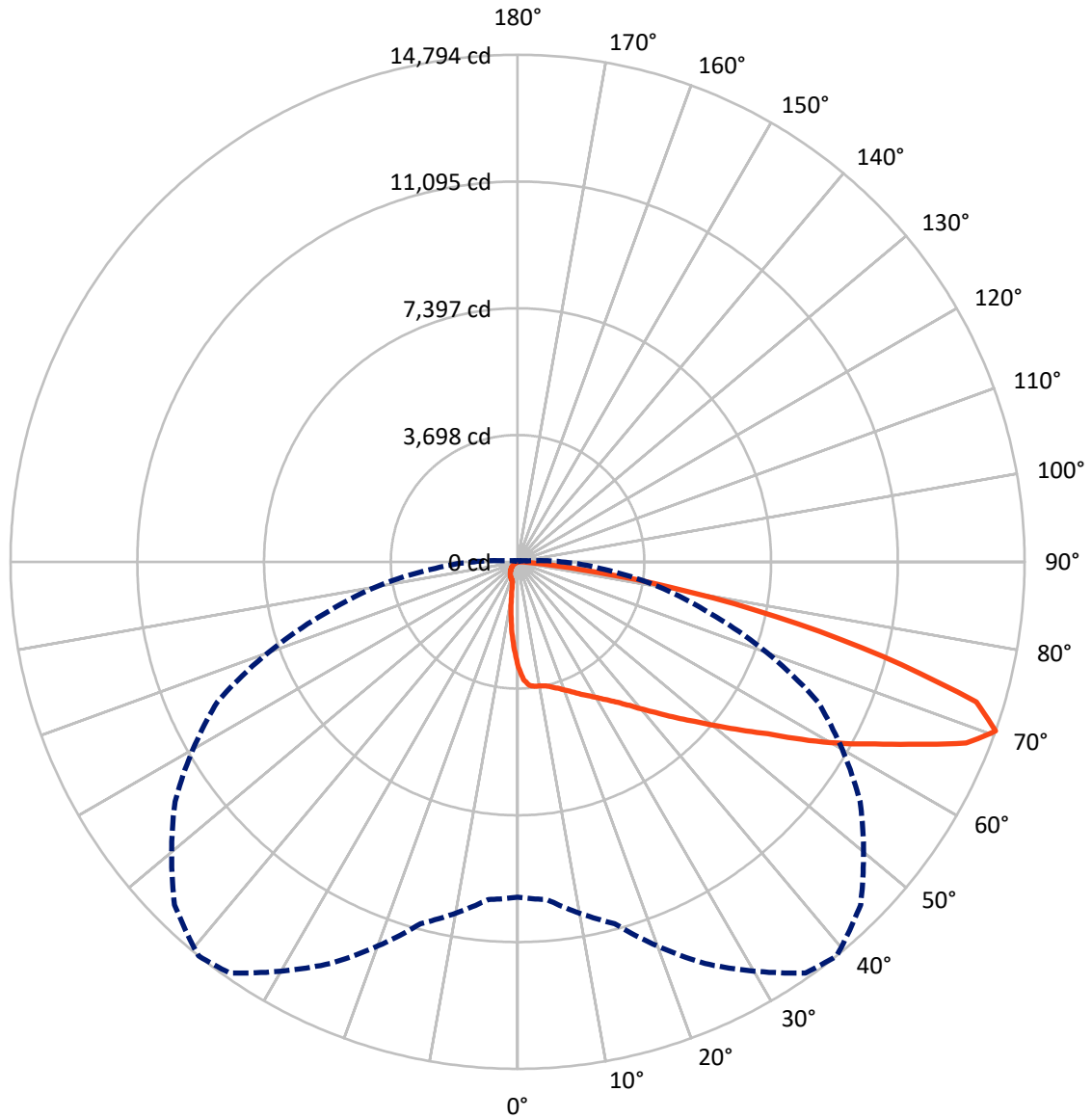
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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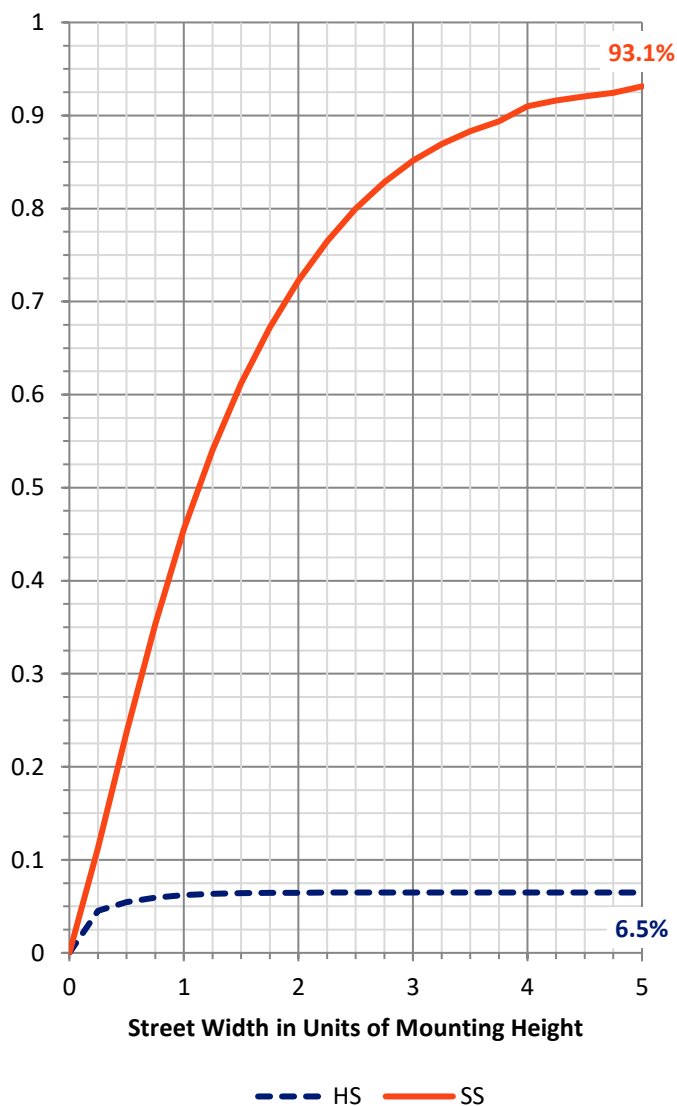
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1285.2	0.0	1285.2
	% Fixture	6.5	0.0	6.5
<b>Street Side</b>	Lumens	18425.3	0.0	18425.3
	% Fixture	93.5	0.0	93.5
<b>Total</b>	Lumens	19710.5	0.0	19710.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	262.3	1.3
10°-20°	681.7	3.5
20°-30°	1142.0	5.8
30°-40°	1771.1	9.0
40°-50°	2806.7	14.2
50°-60°	4114.2	20.9
60°-70°	5273.5	26.8
70°-80°	3313.7	16.8
80°-90°	345.2	1.8
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°	19710.5	100.0
0°-180°	19710.5	100.0

**Coefficient of Utilization**



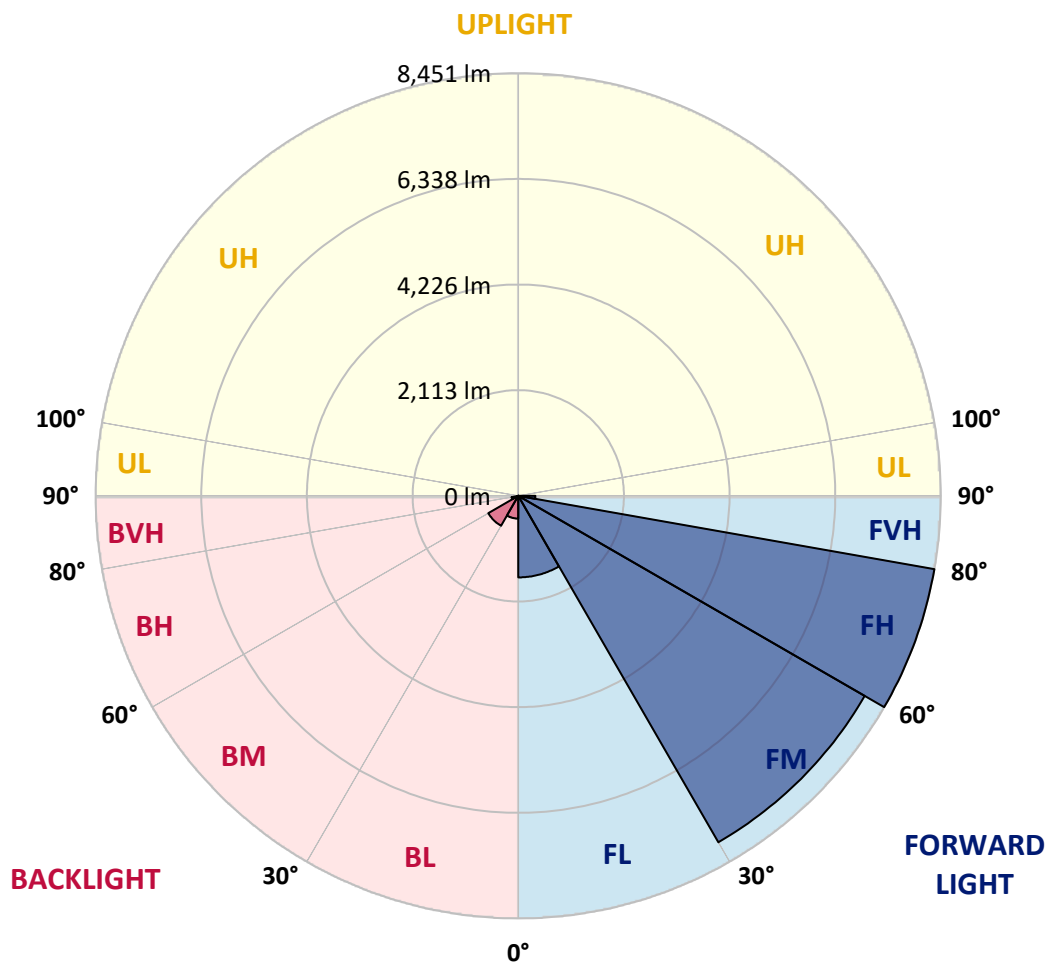
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1630.9	8.3			
FM (30°-60°)	8000.4	40.6			
FH (60°-80°)	8451.2	42.9			G4/12000
FVH (80°-90°)	342.7	1.7			G3/500
BL (0°-30°)	455.1	2.3	B1/500		
BM (30°-60°)	691.7	3.5	B1/1000		
BH (60°-80°)	135.9	0.7	B1/500		G1/500
BVH (80°-90°)	2.5	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-G4**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	3075.5	3075.5	3075.5	3075.5	3075.5	3075.5	3075.5	3075.5	3075.5	3075.5	3075.5
2.5°	3553.6	3541.7	3525.8	3507.3	3454.3	3445.0	3413.3	3345.7	3264.9	3198.7	3107.3
5°	3721.8	3728.5	3716.6	3683.5	3645.0	3622.5	3582.8	3478.2	3373.6	3239.7	3090.1
7.5°	3760.3	3773.5	3758.9	3727.2	3690.0	3666.2	3634.5	3544.4	3422.5	3270.2	3064.9
10°	3756.3	3772.2	3762.9	3733.8	3703.4	3680.8	3646.4	3574.9	3476.8	3316.6	3072.9
12.5°	3749.7	3770.8	3769.5	3755.0	3729.8	3712.6	3691.4	3627.8	3536.4	3384.1	3116.6
15°	3731.2	3757.6	3781.5	3793.4	3794.7	3794.7	3768.2	3700.7	3613.2	3472.8	3173.5
17.5°	3739.1	3769.5	3829.2	3863.6	3887.4	3884.8	3857.0	3784.1	3687.5	3564.2	3233.1
20°	3788.1	3829.2	3912.6	3981.5	4005.3	3997.4	3960.3	3875.5	3765.6	3642.4	3291.4
22.5°	3908.7	3945.7	4050.4	4131.1	4148.3	4127.2	4074.2	3958.9	3859.6	3727.2	3361.6
25°	4088.7	4132.4	4229.1	4290.1	4290.1	4278.2	4204.0	4068.9	3965.6	3845.1	3453.0
27.5°	4307.3	4344.4	4439.8	4494.0	4462.2	4427.9	4353.6	4190.8	4091.4	3993.4	3563.0
30°	4528.5	4552.4	4653.0	4676.9	4643.7	4600.0	4520.6	4357.6	4270.2	4194.7	3721.8
32.5°	4737.8	4789.5	4872.8	4867.6	4822.5	4801.4	4728.5	4554.9	4506.0	4498.0	3944.4
35°	4947.1	4986.8	5060.9	5079.5	5039.8	5035.8	4982.8	4854.3	4855.6	4907.3	4291.4
37.5°	5127.2	5162.9	5250.3	5291.4	5299.3	5319.2	5298.0	5213.3	5333.8	5475.5	4751.0
40°	5278.2	5328.5	5439.7	5511.3	5593.4	5666.3	5670.3	5688.7	5931.1	6174.9	5351.0
42.5°	5396.0	5466.3	5627.8	5760.3	5948.4	6041.1	6115.2	6217.3	6625.2	6989.4	6058.3
45°	5549.7	5630.5	5831.8	6039.7	6333.8	6486.1	6589.4	6862.3	7441.1	7937.7	6784.1
47.5°	5804.0	5846.3	6051.7	6355.0	6741.7	6959.0	7160.3	7573.6	8316.6	8761.6	7388.1
50°	6131.1	6159.0	6314.0	6735.1	7235.8	7521.9	7888.8	8374.9	9225.2	9445.1	7729.9
52.5°	6492.7	6502.0	6618.5	7153.6	7789.4	8149.7	8560.3	9160.3	9965.6	9932.5	7956.3
55°	6912.6	6899.3	6998.7	7607.9	8445.0	8857.0	9335.2	9964.3	10608.0	10278.2	8086.1
57.5°	7393.4	7357.6	7454.3	8210.6	9284.8	9777.6	10263.6	10658.4	11106.0	10568.2	8148.4
60°	7896.7	7825.2	7940.4	8887.4	10274.2	10741.7	11145.8	11251.7	11630.5	10798.7	8041.1
62.5°	8298.1	8299.3	8514.0	9608.0	11291.4	11700.7	11915.3	12010.7	12082.2	10748.4	7476.9
65°	8924.6	8945.7	9288.8	10608.0	12468.9	12823.9	12970.9	12661.0	12102.0	10123.3	6629.2
67.5°	9570.9	9638.4	10266.2	11985.5	13829.2	14115.3	13925.9	12786.8	11561.6	8696.7	5026.5
70°	9781.5	9892.7	10927.2	12933.8	14645.1	14793.5	14152.3	12200.1	9665.0	5814.6	2529.8
72.5°	8962.9	9143.1	10547.1	12588.1	14124.5	13996.0	12662.3	10231.9	6144.4	2208.0	772.2
75°	6320.5	6400.0	8765.6	10442.4	11360.3	10996.1	9631.8	6596.1	2527.1	619.9	264.9
77.5°	3263.6	3225.2	5213.3	6928.5	8102.0	7724.5	6307.3	3414.6	957.6	258.3	164.3
80°	1687.4	1715.2	2255.7	3630.5	4945.7	4551.0	3362.9	1582.8	510.0	143.1	125.8
82.5°	945.7	887.5	1296.7	1585.4	2312.6	1813.3	1290.1	1120.6	222.5	86.1	119.2
85°	172.2	180.2	711.3	857.0	802.7	510.0	415.9	748.3	64.9	47.7	83.5
87.5°	2.7	2.7	137.7	246.3	156.3	71.5	131.2	107.3	13.2	18.6	14.6
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°	3075.5	3075.5	3075.5	3075.5	3075.5	3075.5	3075.5	3075.5	3075.5	3075.5	3075.5
2.5°	3060.9	3010.6	2916.6	2823.9	2706.0	2609.3	2544.4	2476.9	2408.0	2413.3	2429.2
5°	3008.0	2920.5	2735.1	2539.1	2351.0	2181.4	2014.6	1864.9	1804.0	1748.4	1751.0
7.5°	2955.0	2831.8	2560.3	2253.0	1968.2	1679.5	1470.2	1298.0	1206.6	1137.8	1117.9
10°	2931.2	2768.2	2400.0	1977.5	1573.5	1258.3	989.4	849.0	740.4	706.0	715.3
12.5°	2941.7	2736.4	2255.7	1728.5	1247.7	876.8	688.7	617.2	593.4	589.4	586.8
15°	2961.6	2713.9	2113.9	1453.0	916.6	651.7	578.8	565.6	562.9	560.2	561.6
17.5°	2988.1	2694.1	1962.9	1194.7	703.3	569.6	548.3	541.8	540.4	540.4	540.4
20°	3014.6	2671.5	1794.7	964.3	586.8	537.8	524.5	520.5	519.2	519.2	517.9
22.5°	3045.0	2651.6	1623.9	757.6	540.4	515.2	503.3	500.7	499.3	498.0	498.0
25°	3088.8	2626.5	1442.4	619.9	511.3	494.1	482.1	479.5	478.2	472.9	474.2
27.5°	3147.0	2607.9	1255.6	535.1	484.8	467.5	459.6	455.6	453.0	449.0	450.3
30°	3226.5	2592.0	1057.0	488.7	454.3	439.7	431.8	429.2	426.5	422.5	422.5
32.5°	3364.2	2598.7	847.7	451.6	426.5	409.3	401.3	398.7	396.0	392.0	392.0
35°	3570.9	2637.1	678.2	419.8	393.4	376.2	368.2	368.2	364.3	358.9	357.6
37.5°	3908.7	2735.1	544.3	389.4	361.6	345.7	336.5	333.8	329.8	321.9	320.6
40°	4307.3	2887.4	458.3	358.9	332.5	316.6	308.6	300.7	290.1	282.1	280.8
42.5°	4807.9	3043.8	397.4	328.5	304.7	290.1	280.8	267.6	251.7	241.1	239.8
45°	5329.8	3186.7	356.3	300.7	278.1	266.2	255.6	234.4	214.5	201.3	200.0
47.5°	5719.2	3213.3	323.1	274.2	255.6	243.7	229.1	202.6	176.2	164.3	160.3
50°	5903.4	3084.8	288.8	247.7	233.1	219.9	201.3	170.9	141.7	127.2	124.5
52.5°	5968.3	2862.3	260.9	223.9	210.6	194.7	172.2	137.7	111.3	96.7	95.4
55°	5941.7	2581.5	235.8	201.3	184.1	165.5	143.1	109.9	82.1	70.2	67.6
57.5°	5802.7	2223.9	210.6	178.8	157.6	139.1	113.9	82.1	55.6	45.0	43.7
60°	5427.8	1736.5	185.4	153.6	133.7	113.9	90.0	58.3	34.5	25.1	25.1
62.5°	4794.7	1288.7	161.6	128.5	112.6	91.4	63.6	37.1	18.6	13.2	11.9
65°	4006.6	951.0	135.1	108.6	94.0	71.5	45.0	22.6	9.2	4.0	2.7
67.5°	2796.0	586.8	112.6	88.7	76.8	51.7	27.8	9.2	4.0	0.0	0.0
70°	1270.2	279.5	86.1	67.6	58.3	37.1	14.6	5.3	2.7	0.0	0.0
72.5°	394.7	147.0	60.9	49.0	39.7	23.8	7.9	4.0	2.7	0.0	0.0
75°	182.8	94.0	38.4	26.5	22.6	11.9	5.3	2.7	1.3	0.0	0.0
77.5°	136.4	72.8	22.6	14.6	11.9	7.9	4.0	2.7	1.3	0.0	0.0
80°	119.2	37.1	13.2	9.2	6.7	5.3	2.7	1.3	0.0	0.0	0.0
82.5°	107.3	18.6	7.9	5.3	4.0	2.7	1.3	1.3	0.0	0.0	0.0
85°	58.3	10.6	5.3	4.0	2.7	1.3	1.3	0.0	0.0	0.0	0.0
87.5°	10.6	5.3	4.0	2.7	2.7	1.3	1.3	1.3	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)