

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: P647429

Luminaire Tested: **GALN-SA5D-835-U-AFL-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P647429  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA5D-835-U-AFL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24853.2 lumens  
Efficiency: N/A  
Efficacy: 80.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

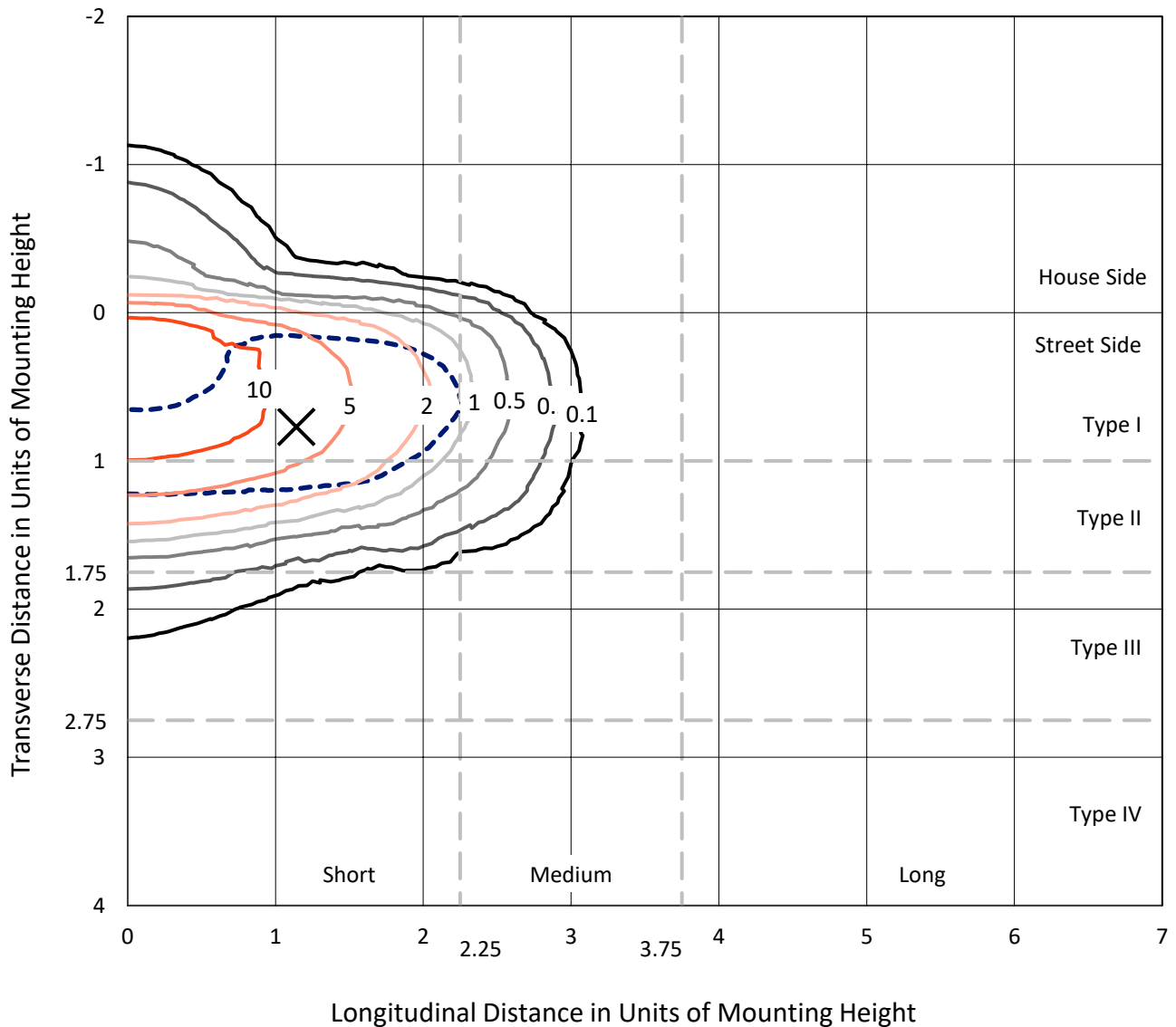
Input Watts (W): 309  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

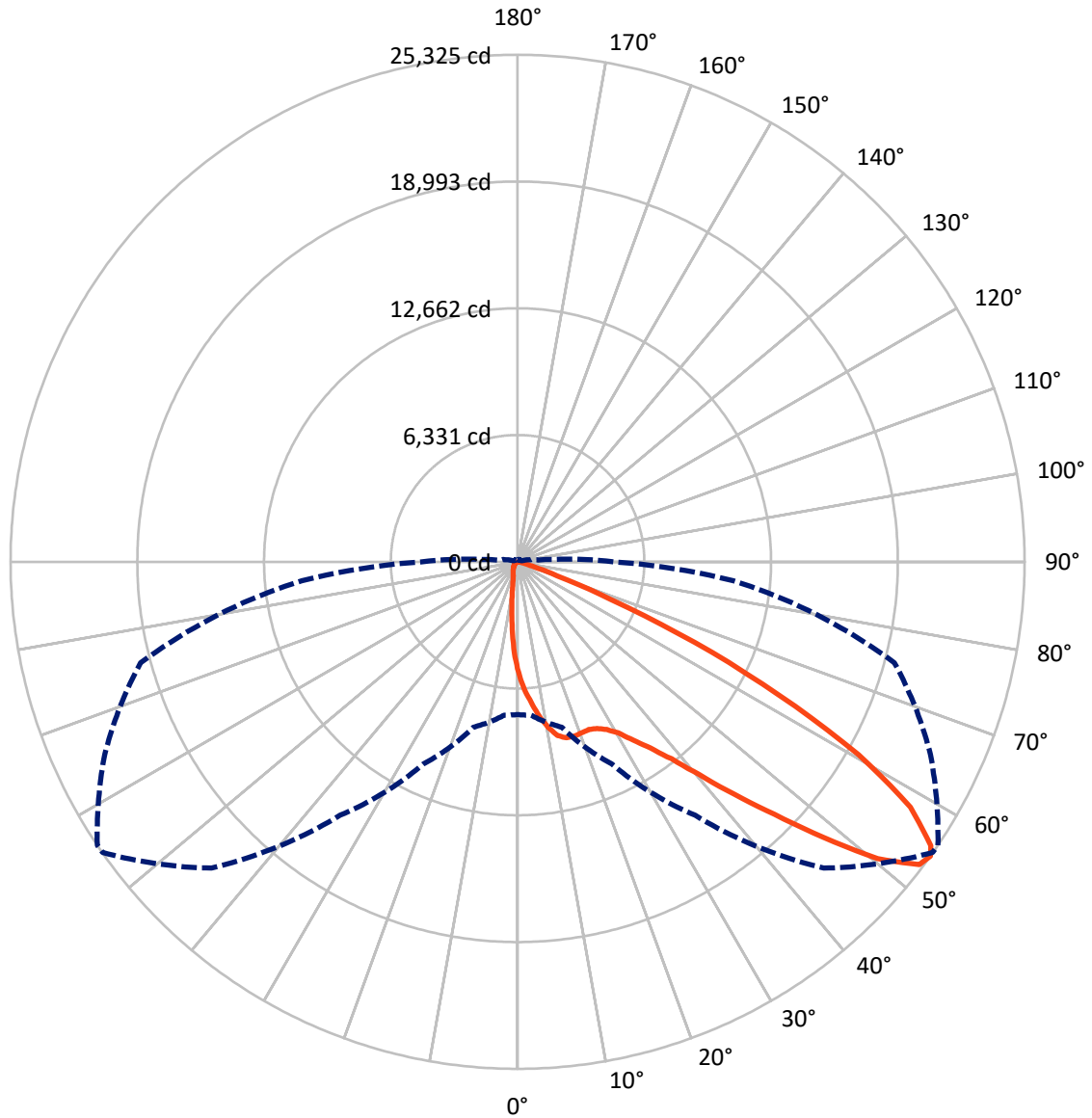
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.2 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral      - - - Horizontal Cone Through 54-Deg Vertical

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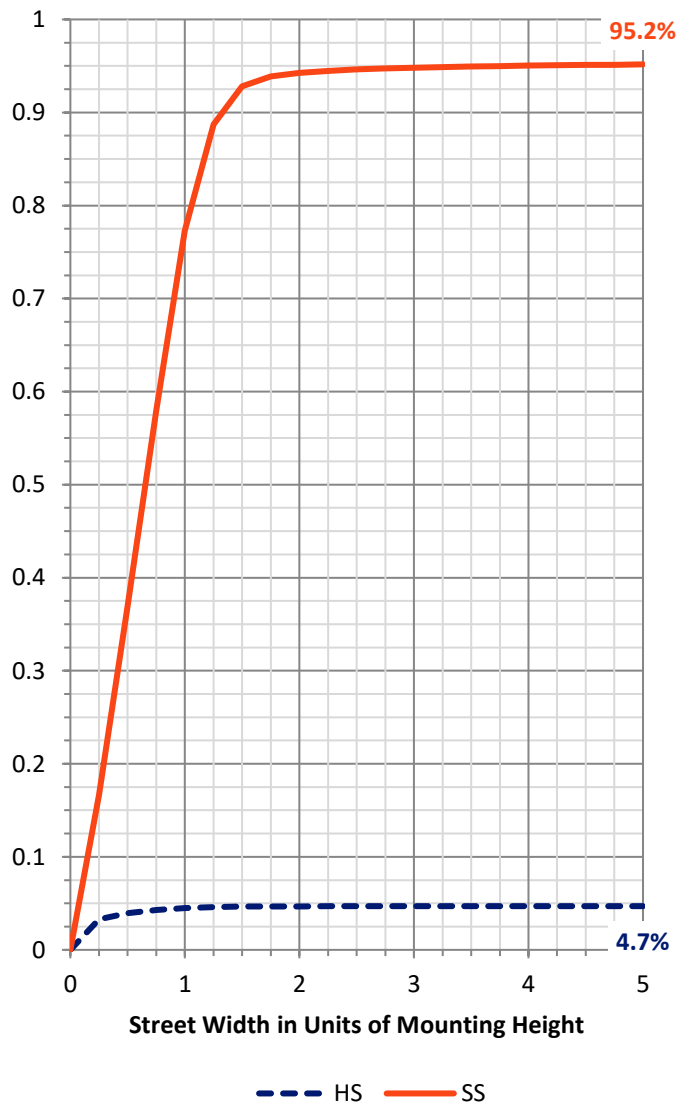
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1175.2	0.0	1175.2
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	23678.0	0.0	23678.0
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	24853.2	0.0	24853.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	487.9	2.0
10°-20°	1319.0	5.3
20°-30°	2284.4	9.2
30°-40°	3943.3	15.9
40°-50°	6711.7	27.0
50°-60°	6642.0	26.7
60°-70°	3031.6	12.2
70°-80°	389.3	1.6
80°-90°	43.9	0.2
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°	24853.2	100.0
0°-180°	24853.2	100.0

**Coefficient of Utilization**



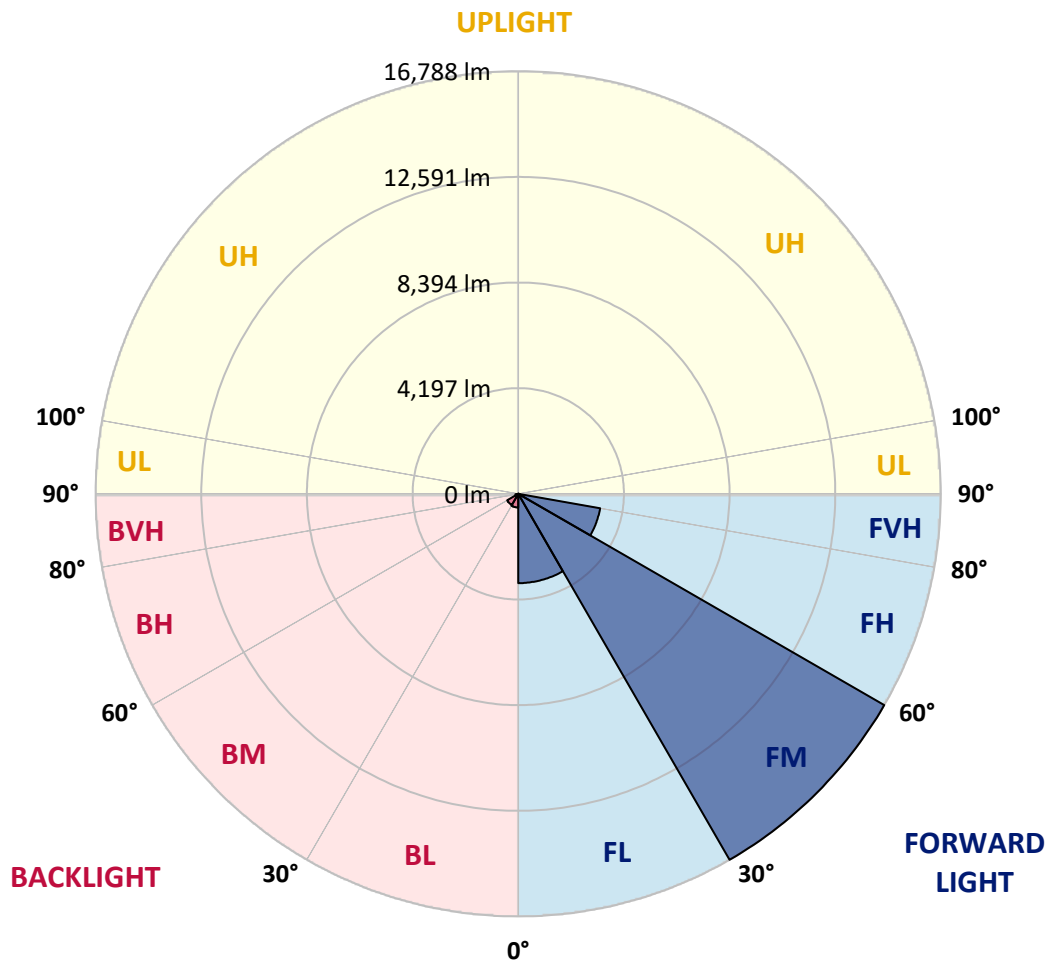
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3547.9	14.3			
FM (30°-60°)	16787.7	67.5			
FH (60°-80°)	3303.2	13.3			G2/5000
FVH (80°-90°)	39.2	0.2			G1/100
BL (0°-30°)	543.5	2.2	B2/1000		
BM (30°-60°)	509.3	2.0	B1/1000		
BH (60°-80°)	117.7	0.5	B1/500		G1/500
BVH (80°-90°)	4.7	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-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	5521.6	5521.6	5521.6	5521.6	5521.6	5521.6	5521.6	5521.6	5521.6	5521.6	5521.6
2.5°	7017.3	6968.7	6901.7	6849.7	6727.3	6551.2	6365.1	6365.1	6185.7	5935.8	5681.0
5°	8093.9	8062.0	7996.6	7862.5	7725.0	7478.5	7104.6	7039.2	6718.9	6266.2	5790.0
7.5°	8531.5	8546.6	8550.0	8514.7	8449.4	8206.2	7835.6	7790.4	7278.9	6671.9	5932.5
10°	8112.3	8186.1	8258.2	8404.1	8610.3	8669.0	8459.4	8412.5	7909.4	7082.8	6086.7
12.5°	7488.5	7528.8	7569.0	7798.8	8212.9	8687.5	8907.1	8905.5	8479.5	7491.9	6282.9
15°	7198.4	7233.7	7237.0	7339.3	7698.1	8389.0	9098.2	9123.4	9036.2	7996.6	6494.2
17.5°	7258.8	7287.3	7263.8	7289.0	7476.8	8060.4	9076.5	9160.3	9487.3	8481.2	6685.3
20°	7652.9	7708.2	7617.7	7547.3	7604.3	7973.1	9002.7	9120.1	9805.9	8954.1	6859.7
22.5°	8360.5	8390.6	8276.6	8083.8	7983.2	8155.9	8982.6	9098.2	10077.5	9341.4	6960.3
25°	9146.8	9136.8	9011.1	8794.7	8583.5	8524.8	9115.1	9219.0	10302.2	9690.2	6990.5
27.5°	9933.3	9963.5	9752.2	9483.9	9230.7	9078.1	9411.8	9488.9	10555.4	10087.5	7027.4
30°	10847.1	10798.5	10590.6	10283.8	9993.7	9780.7	9889.7	9911.5	10904.1	10614.1	7124.7
32.5°	12036.0	11901.8	11668.8	11132.2	10924.3	10563.8	10590.6	10617.4	11328.4	11135.6	7242.0
35°	13649.1	13642.4	13186.3	12463.6	11957.2	11509.5	11392.1	11413.9	11970.6	11910.2	7501.9
37.5°	15590.8	15617.6	15097.8	14370.1	13437.8	12726.8	12485.4	12488.7	12946.5	12980.0	7897.7
40°	17172.0	17242.4	16932.2	16440.9	15520.4	14408.7	14002.9	13966.0	14318.1	14276.2	8462.7
42.5°	17852.8	17918.2	18033.9	18204.9	17698.5	16781.3	15823.9	15874.2	15981.5	15688.0	9096.6
45°	17519.1	17623.1	18077.4	19133.9	19610.1	19301.5	18159.6	17983.6	17529.2	17222.3	9733.8
47.5°	16129.0	16382.2	17141.8	18900.8	20567.5	21610.5	20795.5	20562.4	19078.5	18342.4	10139.5
50°	13843.6	13858.6	14916.7	17165.3	20071.2	23067.6	23486.8	23312.4	20522.2	18971.2	10344.1
52.5°	10035.6	10365.9	11335.1	13939.1	17921.5	22846.2	25202.1	25130.1	22011.2	19293.1	10639.2
54°	7629.4	7693.1	8555.0	11138.9	15451.6	21630.6	25307.8	25324.6	22750.7	19487.6	10813.6
55°	6254.4	6101.8	7007.3	9488.9	13766.5	20555.8	24962.4	25042.8	23082.7	19588.2	10942.7
57.5°	2964.6	2966.2	3658.7	5005.2	8622.1	15961.4	22851.3	23136.3	23119.6	19761.0	11340.1
60°	1500.7	1510.8	1663.4	2310.6	4259.1	10610.7	18894.0	19573.2	21340.5	19786.1	11471.0
62.5°	1049.7	1037.9	1012.8	1111.7	1792.5	5392.5	14066.6	14656.8	18131.1	18828.6	11055.1
65°	898.7	873.6	803.2	788.1	905.5	2148.0	8761.2	9723.7	13843.6	16303.4	9871.3
67.5°	768.0	757.9	694.2	655.6	640.6	935.7	4520.7	5027.0	9462.1	11719.1	7476.8
70°	652.2	647.2	608.7	560.1	518.1	560.1	1676.8	2077.5	5273.5	6309.7	3528.0
72.5°	529.9	534.9	541.6	479.6	436.0	397.4	716.0	833.3	2206.7	2255.3	1234.1
75°	464.5	459.5	459.5	417.5	363.9	295.1	394.1	424.2	675.7	627.1	286.7
77.5°	327.0	315.2	368.9	343.7	303.5	209.6	224.7	238.1	280.0	239.8	134.1
80°	226.4	226.4	236.5	308.5	273.3	152.6	137.5	147.6	166.0	142.5	77.1
82.5°	127.5	130.8	154.3	164.4	159.3	102.3	90.5	92.2	110.6	97.2	48.6
85°	15.1	25.1	88.9	87.2	65.4	45.3	50.3	52.0	68.7	60.4	28.5
87.5°	1.6	3.4	18.5	23.5	16.8	18.5	18.5	18.5	23.5	26.9	20.1
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°	5521.6	5521.6	5521.6	5521.6	5521.6	5521.6	5521.6	5521.6	5521.6	5521.6	5521.6
2.5°	5543.5	5416.0	5112.5	4760.4	4535.7	4170.2	3861.7	3638.6	3583.3	3476.0	3507.8
5°	5536.7	5271.9	4653.1	3999.2	3301.6	2781.8	2394.5	2089.3	1955.2	1866.3	1804.2
7.5°	5540.1	5125.9	4133.3	3092.0	2258.6	1748.9	1390.1	1203.9	1079.8	1027.8	1034.6
10°	5550.1	4961.6	3529.6	2290.5	1524.2	1130.2	910.5	821.6	779.7	773.0	771.3
12.5°	5573.6	4782.2	2952.8	1700.3	1066.4	821.6	737.8	707.6	694.2	694.2	689.2
15°	5598.8	4584.3	2473.3	1264.3	821.6	706.0	667.4	652.2	643.9	643.9	642.2
17.5°	5598.8	4356.3	2025.5	980.9	707.6	649.0	618.7	598.6	591.9	591.9	590.2
20°	5563.6	4091.3	1628.2	789.7	642.2	595.2	565.1	543.2	534.9	531.6	529.9
22.5°	5441.1	3737.6	1296.2	679.1	588.6	548.3	509.7	484.6	477.9	474.5	476.2
25°	5223.2	3338.5	1026.2	597.0	540.0	491.3	457.7	439.3	432.6	432.6	434.3
27.5°	4998.5	2921.0	813.2	534.9	481.2	437.6	410.8	399.1	397.4	402.5	404.1
30°	4790.6	2501.8	659.0	484.6	429.2	392.4	374.0	370.6	370.6	372.2	374.0
32.5°	4559.2	2134.5	551.7	441.0	387.4	355.5	345.4	345.4	348.7	348.7	352.1
35°	4413.3	1819.3	484.6	399.1	355.5	328.6	322.0	323.6	328.6	335.4	338.7
37.5°	4334.5	1567.8	441.0	365.5	325.3	306.9	300.1	303.5	315.2	327.0	328.6
40°	4341.2	1378.3	405.8	337.0	301.8	281.7	276.6	286.7	298.5	310.2	311.9
42.5°	4415.0	1237.5	372.2	303.5	281.7	253.2	251.5	261.6	266.6	278.4	280.0
45°	4502.2	1135.2	337.0	268.3	244.8	219.6	221.4	229.7	236.5	254.9	258.2
47.5°	4529.0	1064.7	296.8	228.0	201.2	192.9	194.5	199.5	213.0	229.7	231.4
50°	4559.2	1021.2	258.2	192.9	171.0	169.4	171.0	174.4	182.8	189.5	187.8
52.5°	4688.3	1019.5	226.4	167.6	145.9	149.2	150.9	149.2	142.5	132.5	129.1
54°	4809.0	1024.6	211.3	156.0	134.1	139.1	137.5	129.1	112.4	102.3	97.2
55°	4906.3	1029.6	202.9	147.6	127.5	129.1	130.8	114.0	92.2	82.1	78.8
57.5°	5097.4	1017.8	182.8	129.1	112.4	105.6	104.0	75.5	50.3	43.6	40.2
60°	5001.9	918.9	166.0	110.6	95.6	85.5	70.4	41.9	25.1	18.5	18.5
62.5°	4626.3	779.7	147.6	90.5	78.8	65.4	36.9	23.5	11.7	6.7	5.0
65°	4138.3	655.6	132.5	72.1	62.0	41.9	20.1	15.1	5.0	0.0	0.0
67.5°	3076.9	486.2	112.4	57.0	47.0	26.9	13.4	8.4	1.6	0.0	0.0
70°	1425.3	296.8	95.6	43.6	33.5	20.1	10.0	5.0	0.0	0.0	0.0
72.5°	409.1	186.1	78.8	31.9	23.5	16.8	8.4	3.4	1.6	0.0	0.0
75°	142.5	149.2	58.7	23.5	18.5	11.7	6.7	3.4	1.6	0.0	0.0
77.5°	85.5	120.7	36.9	20.1	15.1	10.0	6.7	3.4	1.6	1.6	0.0
80°	48.6	80.5	23.5	16.8	13.4	8.4	5.0	3.4	1.6	1.6	0.0
82.5°	26.9	38.6	18.5	15.1	11.7	8.4	5.0	3.4	1.6	1.6	1.6
85°	21.8	20.1	15.1	13.4	10.0	6.7	5.0	1.6	0.0	0.0	0.0
87.5°	16.8	13.4	13.4	13.4	10.0	6.7	5.0	1.6	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)