

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: P456154

Luminaire Tested: **GALN-SA7B-827-U-T2R-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456154
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-7)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA7B-827-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23326 lumens
Efficiency: N/A
Efficacy: 81.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

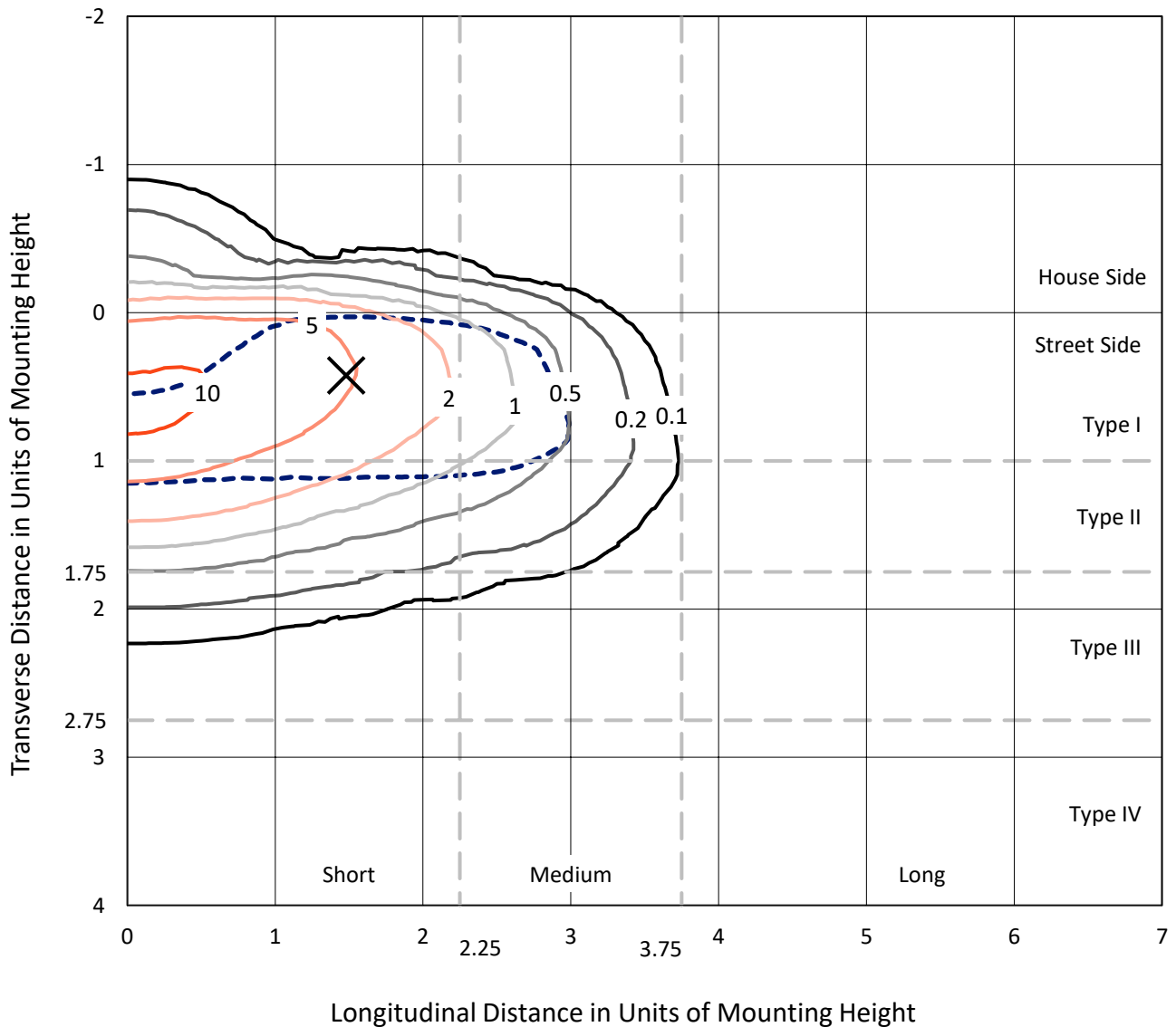
Input Watts (W): 286
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

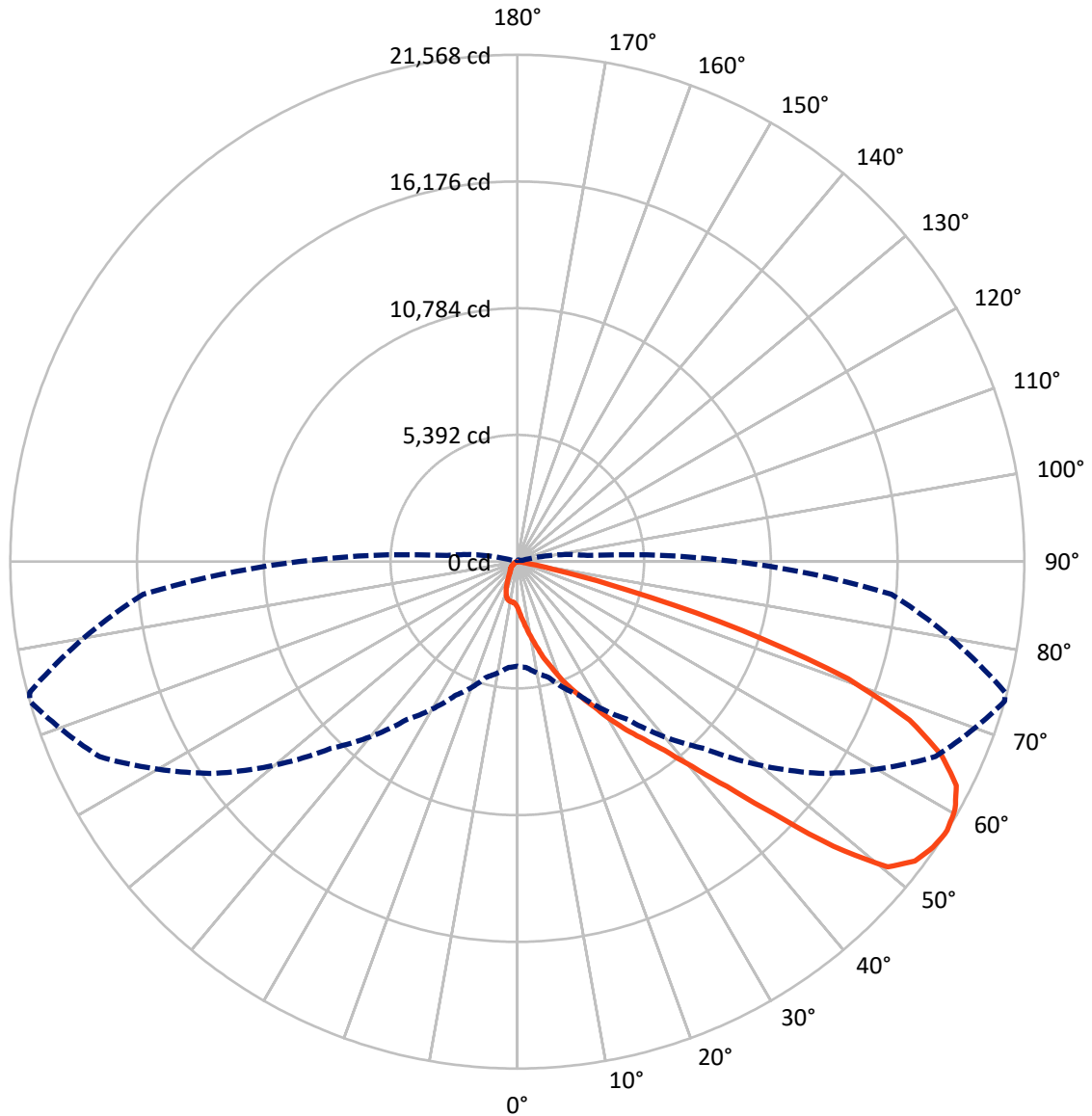
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral - - - Horizontal Cone Through 57-Deg Vertical

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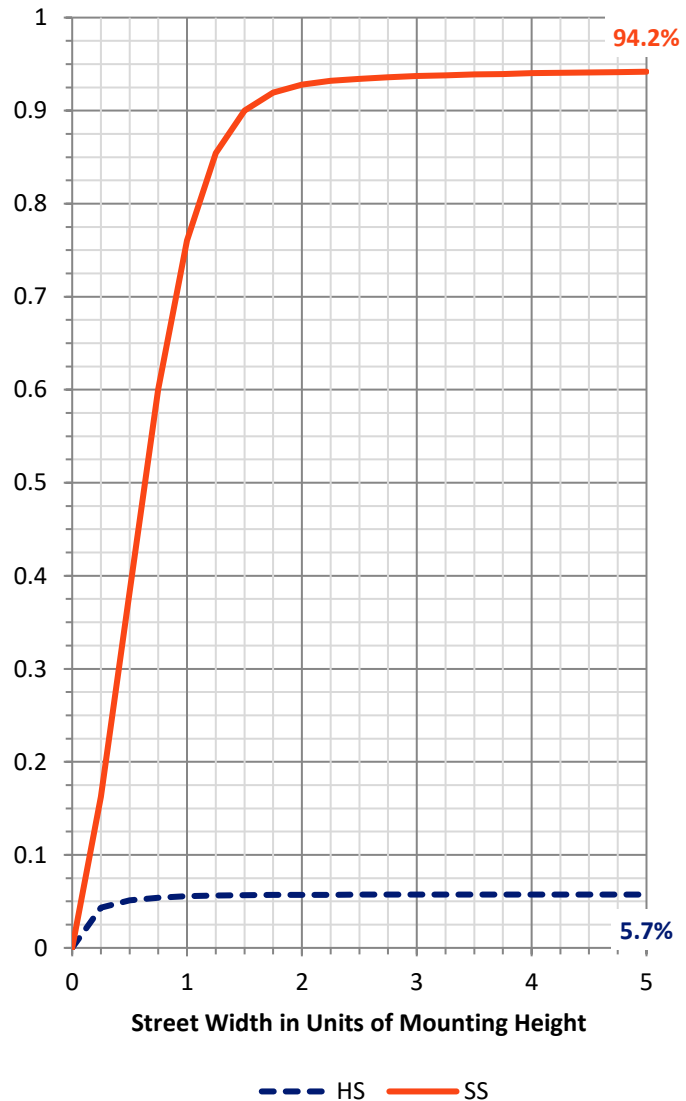
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1345.4	0.0	1345.4
	% Fixture	5.8	0.0	5.8
Street Side	Lumens	21980.6	0.0	21980.6
	% Fixture	94.2	0.0	94.2
Total	Lumens	23326.0	0.0	23326.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.8	1.0
10°-20°	929.4	4.0
20°-30°	1988.7	8.5
30°-40°	3655.2	15.7
40°-50°	5603.5	24.0
50°-60°	5927.8	25.4
60°-70°	3871.0	16.6
70°-80°	1057.7	4.5
80°-90°	56.9	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°	23326.0	100.0
0°-180°	23326.0	100.0

Coefficient of Utilization



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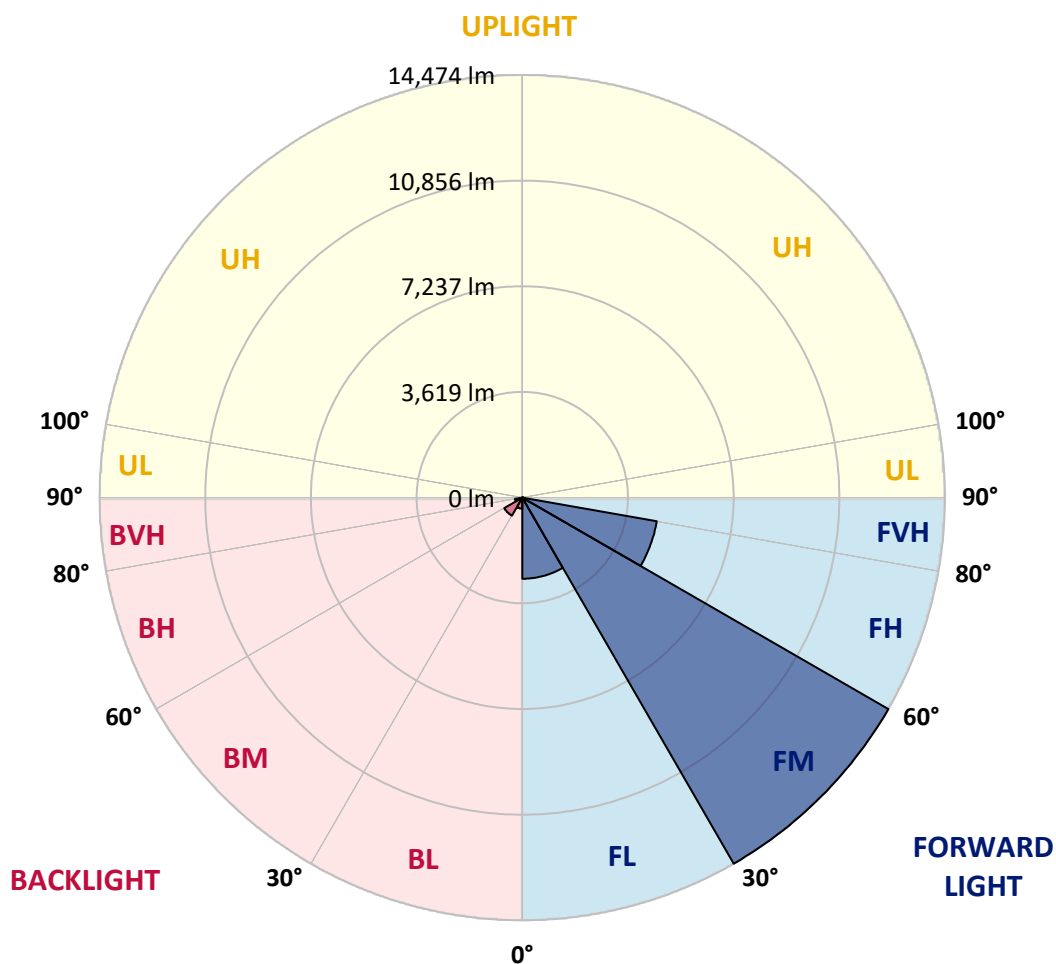
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2778.1	11.9			
FM (30°-60°)	14474.2	62.1			
FH (60°-80°)	4676.1	20.0			G2/5000
FVH (80°-90°)	52.2	0.2			G1/100
BL (0°-30°)	375.8	1.6	B1/500		
BM (30°-60°)	712.3	3.1	B1/1000		
BH (60°-80°)	252.6	1.1	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: B1-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1953.5	1953.5	1953.5	1953.5	1953.5	1953.5	1953.5	1953.5	1953.5	1953.5	1953.5
2.5°	2858.6	2832.8	2781.3	2763.6	2687.9	2570.3	2467.3	2328.8	2219.3	2208.0	2075.9
5°	3828.1	3770.2	3746.0	3630.0	3448.1	3277.3	2984.2	2762.0	2505.9	2486.6	2220.9
7.5°	4762.2	4681.7	4657.5	4548.0	4335.4	4066.5	3686.4	3282.2	2876.3	2839.3	2415.7
10°	5438.6	5449.9	5406.4	5333.9	5161.6	4887.8	4419.2	3866.8	3288.6	3241.9	2634.8
12.5°	5923.4	5921.8	5929.8	5928.2	5836.4	5628.7	5135.8	4499.7	3742.8	3651.0	2886.0
15°	6239.0	6243.9	6268.0	6351.8	6361.4	6232.6	5821.9	5105.2	4269.4	4155.1	3158.2
17.5°	6557.9	6591.7	6630.4	6709.3	6780.2	6728.6	6438.7	5736.6	4746.1	4660.8	3449.7
20°	7084.5	7131.2	7108.7	7157.0	7194.1	7198.9	6975.0	6319.6	5324.3	5180.9	3783.0
22.5°	7926.8	7925.2	7867.2	7780.3	7707.8	7704.6	7501.7	6918.7	5849.3	5710.8	4118.0
25°	8991.4	8996.2	8883.5	8635.4	8455.1	8234.4	8000.9	7443.7	6411.4	6240.6	4470.7
27.5°	10212.1	10181.5	10010.8	9669.4	9311.8	8935.0	8598.4	8054.1	7007.2	6865.5	4874.9
30°	11308.8	11297.6	11097.9	10680.8	10210.5	9832.0	9344.1	8819.0	7778.7	7604.7	5327.5
32.5°	12329.9	12346.0	12069.0	11637.4	11183.2	10746.8	10231.4	9550.2	8535.6	8289.2	5820.3
35°	13127.1	13143.2	12856.5	12497.4	12030.3	11668.0	11176.8	10329.7	9282.9	9075.1	6387.2
37.5°	13552.3	13573.2	13407.3	13136.8	12845.3	12663.3	12205.9	11333.0	10191.2	10065.6	7057.2
40°	13632.8	13656.9	13584.5	13512.0	13495.9	13626.3	13492.7	12515.1	11450.6	11254.1	8055.7
42.5°	13391.2	13423.4	13455.6	13616.7	13945.2	14423.5	14889.0	14119.1	13072.3	12808.2	9276.4
45°	12756.7	12753.5	12880.7	13297.8	14033.8	15054.8	16348.1	16127.4	15281.9	14967.9	11001.2
47.5°	11671.2	11655.1	11930.5	12524.8	13671.4	15170.8	17538.2	18565.7	18101.9	17812.0	12854.9
50°	10017.2	10096.2	10529.4	11358.8	12771.2	14819.7	17905.4	20164.9	20416.2	20108.6	14352.7
52.5°	8079.8	8076.6	8756.2	9882.0	11437.7	14046.7	17649.3	20454.8	21168.3	20933.1	15090.3
55°	5979.7	6021.6	6728.6	7864.0	9706.4	12635.9	16813.5	20156.9	21454.9	21289.0	15576.6
57°	4448.2	4522.3	5089.1	6290.6	8199.0	11239.6	15700.6	19623.8	21567.7	21477.5	15980.9
57.5°	4151.8	4155.1	4707.5	5799.4	7757.7	10703.3	15381.8	19401.6	21564.4	21514.5	16046.9
60°	2555.8	2636.4	3018.1	3919.9	5678.6	8353.6	13244.7	18124.4	21396.9	21469.4	16328.7
62.5°	1530.0	1563.8	1811.8	2362.6	3660.6	6097.3	10838.6	16489.8	20960.5	21181.1	16309.4
65°	984.0	992.1	1104.8	1430.1	2288.5	4121.2	8352.0	14330.1	19831.6	20237.4	15671.7
67.5°	760.2	773.0	818.1	938.9	1327.0	2567.1	5907.3	12025.5	18005.3	18528.7	14125.6
70°	674.8	681.2	697.3	736.0	877.7	1449.4	3675.1	9394.0	14930.8	15079.0	11054.4
72.5°	550.8	568.5	618.4	631.3	695.7	905.1	2045.3	6305.1	10031.7	10068.8	6184.3
75°	426.8	430.0	504.1	541.1	586.2	623.3	913.1	3179.1	4818.6	4560.9	2383.5
77.5°	318.9	333.4	367.2	413.9	478.3	446.1	409.1	1198.2	1496.1	1468.8	692.5
80°	204.5	212.6	256.1	310.8	372.0	291.5	230.3	351.1	328.5	338.2	165.9
82.5°	103.1	104.7	164.3	252.8	236.7	146.6	144.9	143.3	122.4	120.8	77.3
85°	11.3	24.2	106.3	144.9	106.3	48.3	67.6	66.0	64.4	66.0	45.1
87.5°	1.6	1.6	17.7	20.9	14.5	16.1	19.3	20.9	25.8	24.2	19.3
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°	1953.5	1953.5	1953.5	1953.5	1953.5	1953.5	1953.5	1953.5	1953.5	1953.5	1953.5
2.5°	2011.5	1947.1	1827.9	1713.6	1628.2	1573.4	1502.6	1476.8	1439.8	1434.9	1417.2
5°	2098.5	1976.1	1768.3	1604.0	1472.0	1372.1	1285.2	1212.7	1154.7	1141.8	1148.3
7.5°	2222.5	2040.5	1750.6	1526.7	1343.1	1172.4	1033.9	948.6	887.4	864.8	868.1
10°	2362.6	2125.8	1747.4	1444.6	1164.4	955.0	803.6	727.9	692.5	679.6	665.1
12.5°	2528.5	2224.1	1739.3	1317.4	967.9	761.8	653.9	608.8	574.9	565.3	565.3
15°	2715.3	2328.8	1700.7	1159.6	785.9	629.7	557.2	521.8	510.5	500.9	500.9
17.5°	2910.2	2431.8	1620.2	964.7	652.2	539.5	494.4	473.5	457.4	446.1	446.1
20°	3132.4	2533.3	1491.3	792.4	550.8	481.5	446.1	421.9	409.1	399.4	396.2
22.5°	3343.4	2615.4	1327.0	650.6	479.9	433.2	401.0	375.2	362.4	357.5	357.5
25°	3562.4	2665.4	1129.0	537.9	438.1	393.0	357.5	336.6	325.3	322.1	320.5
27.5°	3775.0	2694.3	955.0	470.3	399.4	355.9	322.1	306.0	294.7	291.5	293.1
30°	4032.7	2699.2	785.9	421.9	365.6	320.5	289.9	275.4	269.0	265.7	264.1
32.5°	4293.6	2692.7	660.3	393.0	333.4	289.9	264.1	252.8	248.0	243.2	243.2
35°	4586.7	2658.9	562.1	364.0	302.8	264.1	241.6	231.9	225.5	220.6	219.0
37.5°	4950.6	2641.2	505.7	331.8	275.4	240.0	219.0	209.4	204.5	198.1	196.5
40°	5524.0	2720.1	488.0	302.8	248.0	217.4	198.1	186.8	180.4	173.9	172.3
42.5°	6239.0	2858.6	459.0	273.8	223.9	196.5	177.2	164.3	153.0	144.9	141.7
45°	7165.1	3040.6	413.9	243.2	202.9	173.9	156.2	140.1	125.6	119.2	117.6
47.5°	8136.2	3216.1	373.6	219.0	180.4	154.6	135.3	117.6	104.7	99.9	98.2
50°	8732.1	3251.6	347.9	191.6	157.8	133.7	114.3	98.2	90.2	85.4	85.4
52.5°	9004.2	3195.2	312.4	167.5	136.9	117.6	98.2	85.4	80.5	77.3	75.7
55°	9194.3	3108.2	265.7	144.9	117.6	99.9	87.0	77.3	70.9	67.6	66.0
57°	9305.4	2990.7	230.3	127.2	101.5	87.0	77.3	69.3	62.8	56.4	56.4
57.5°	9310.2	2945.6	220.6	125.6	96.6	83.7	75.7	67.6	59.6	53.1	51.5
60°	9166.9	2636.4	177.2	106.3	77.3	70.9	62.8	53.1	41.9	35.4	33.8
62.5°	8706.3	2243.4	146.6	90.2	62.8	54.8	45.1	40.3	29.0	20.9	20.9
65°	8009.0	1819.9	125.6	72.5	51.5	40.3	30.6	29.0	17.7	9.7	8.1
67.5°	7000.8	1417.2	106.3	59.6	43.5	29.0	20.9	19.3	9.7	3.2	0.0
70°	5333.9	966.3	88.6	48.3	32.2	20.9	14.5	11.3	6.4	1.6	0.0
72.5°	3074.4	531.5	74.1	37.0	24.2	16.1	11.3	6.4	6.4	0.0	0.0
75°	1098.4	228.7	56.4	27.4	19.3	12.9	8.1	3.2	4.8	1.6	0.0
77.5°	349.5	122.4	37.0	20.9	16.1	9.7	6.4	3.2	3.2	1.6	0.0
80°	103.1	64.4	22.5	17.7	11.3	8.1	4.8	1.6	3.2	1.6	0.0
82.5°	56.4	32.2	17.7	12.9	11.3	6.4	4.8	1.6	1.6	1.6	0.0
85°	29.0	19.3	14.5	12.9	11.3	6.4	4.8	1.6	0.0	1.6	1.6
87.5°	16.1	14.5	14.5	12.9	11.3	8.1	4.8	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)