

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: P453586

Luminaire Tested: **GALN-SA4C-827-U-AFL-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453586  
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-SA4C-827-U-AFL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 1050mA 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: 16751 lumens  
Efficiency: N/A  
Efficacy: 78.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

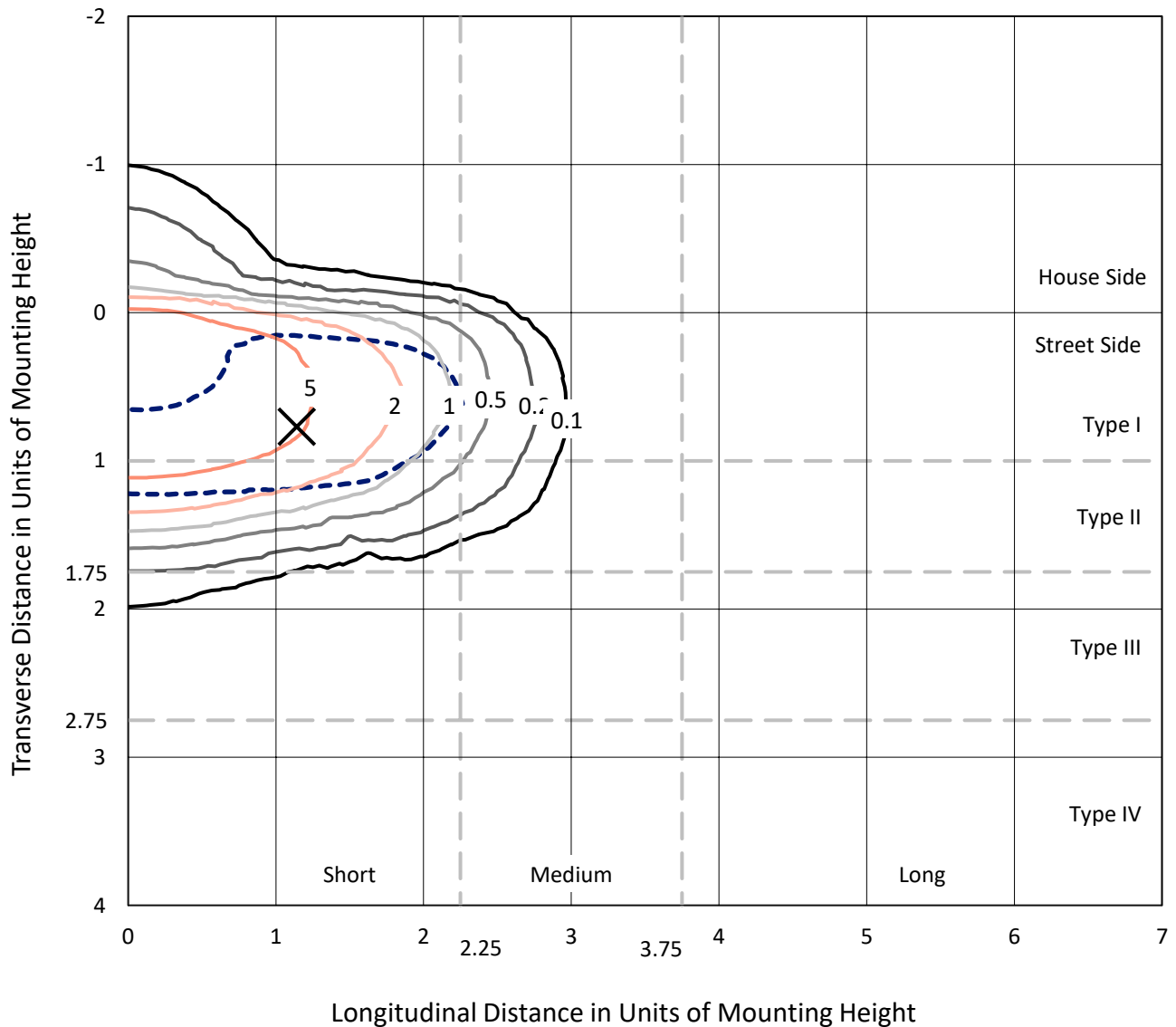
Input Watts (W): 213  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P453586  
 CATALOG NUMBER: GALN-SA4C-827-U-AFL-HSS

### Iso-Footcandle Lines of Horizontal Illumination

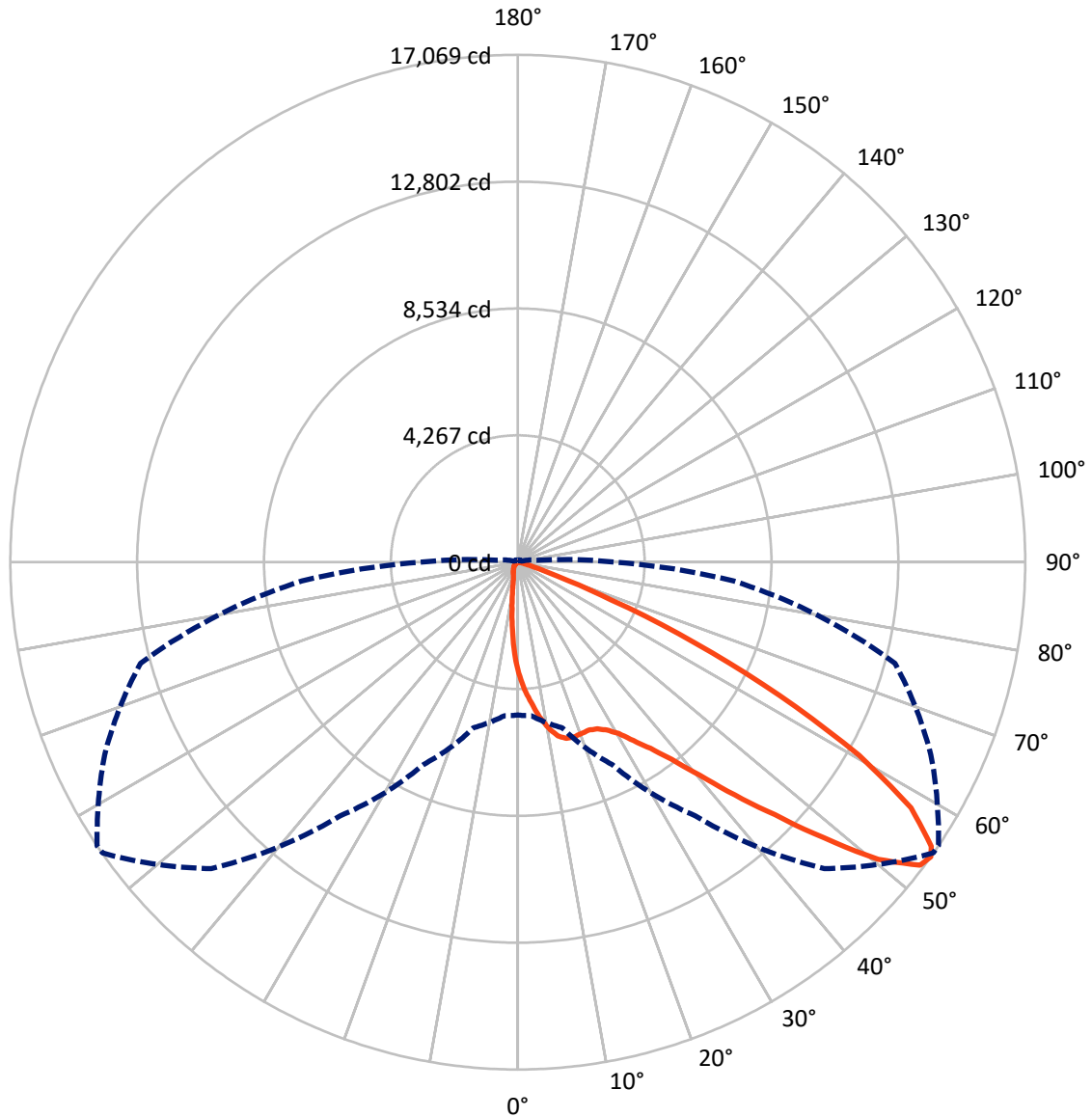
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 fc  
 Type II - Short - N/A

REPORT NUMBER: P453586  
CATALOG NUMBER: GALN-SA4C-827-U-AFL-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P453586  
 CATALOG NUMBER: GALN-SA4C-827-U-AFL-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	792.1	0.0	792.1
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	15958.9	0.0	15958.9
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	16751.0	0.0	16751.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	328.9	2.0
10°-20°	889.0	5.3
20°-30°	1539.7	9.2
30°-40°	2657.8	15.9
40°-50°	4523.7	27.0
50°-60°	4476.7	26.7
60°-70°	2043.3	12.2
70°-80°	262.4	1.6
80°-90°	29.6	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°	16751.0	100.0
0°-180°	16751.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P453586

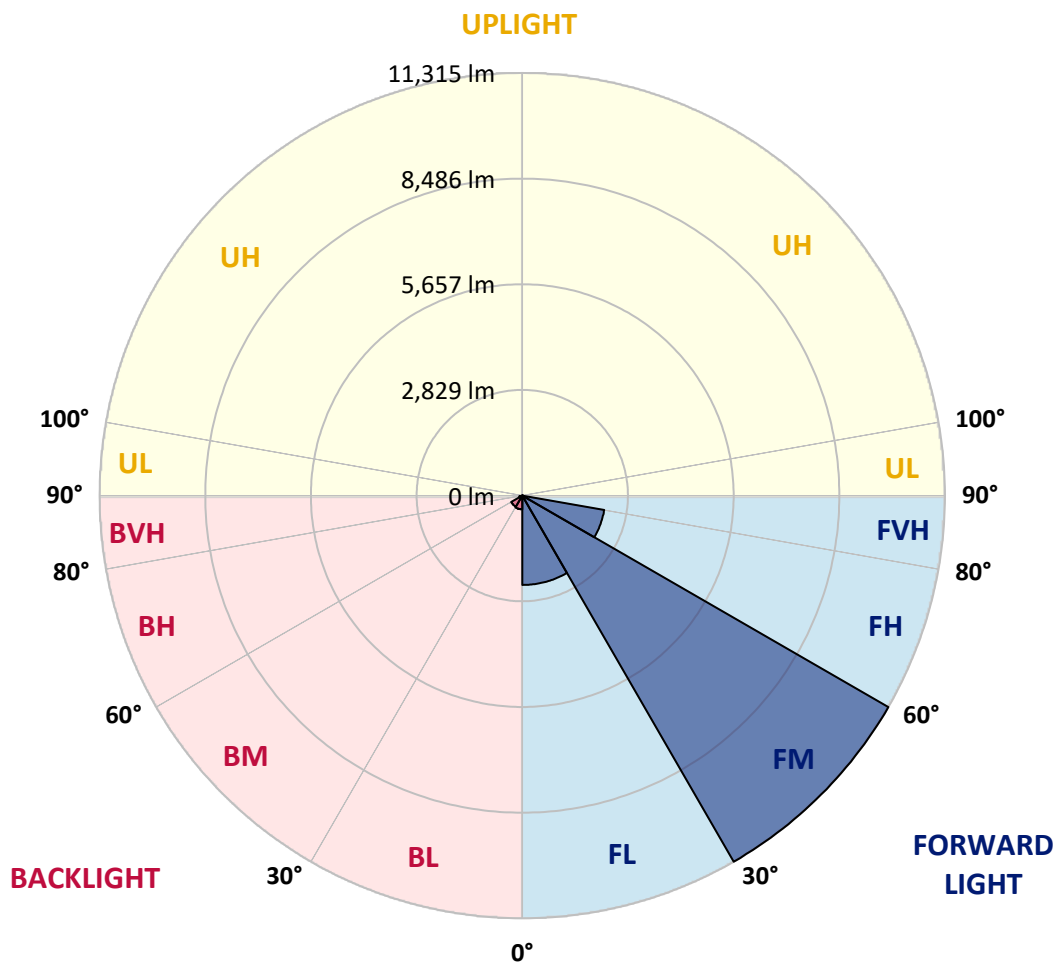
CATALOG NUMBER: GALN-SA4C-827-U-AFL-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2391.3	14.3			
FM (30°-60°)	11314.9	67.5			
FH (60°-80°)	2226.4	13.3			G2/5000
FVH (80°-90°)	26.4	0.2			G1/100
BL (0°-30°)	366.3	2.2	B1/500		
BM (30°-60°)	343.3	2.0	B1/1000		
BH (60°-80°)	79.3	0.5	B0/110		G0/110
BVH (80°-90°)	3.2	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





REPORT NUMBER: P453586

CATALOG NUMBER: GALN-SA4C-827-U-AFL-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	3721.6	3721.6	3721.6	3721.6	3721.6	3721.6	3721.6	3721.6	3721.6	3721.6	3721.6
2.5°	4729.7	4696.9	4651.7	4616.7	4534.2	4415.5	4290.1	4290.1	4169.1	4000.7	3829.0
5°	5455.2	5433.8	5389.7	5299.3	5206.6	5040.5	4788.5	4744.4	4528.5	4223.4	3902.4
7.5°	5750.2	5760.4	5762.6	5738.9	5694.8	5531.0	5281.2	5250.7	4906.0	4496.9	3998.5
10°	5467.7	5517.4	5566.0	5664.3	5803.3	5842.9	5701.6	5670.0	5330.9	4773.8	4102.5
12.5°	5047.3	5074.4	5101.5	5256.3	5535.5	5855.3	6003.4	6002.2	5715.2	5049.5	4234.7
15°	4851.7	4875.5	4877.7	4946.7	5188.5	5654.2	6132.2	6149.2	6090.4	5389.7	4377.1
17.5°	4892.4	4911.6	4895.8	4912.8	5039.3	5432.6	6117.5	6174.0	6394.4	5716.3	4505.9
20°	5158.0	5195.3	5134.3	5086.8	5125.2	5373.9	6067.8	6146.9	6609.1	6035.0	4623.5
22.5°	5634.9	5655.3	5578.4	5448.5	5380.7	5497.1	6054.2	6132.2	6792.2	6296.1	4691.3
25°	6165.0	6158.2	6073.4	5927.6	5785.2	5745.7	6143.5	6213.6	6943.7	6531.1	4711.6
27.5°	6695.0	6715.4	6573.0	6392.1	6221.5	6118.6	6343.5	6395.5	7114.3	6799.0	4736.5
30°	7311.0	7278.2	7138.0	6931.2	6735.7	6592.2	6665.6	6680.3	7349.4	7153.9	4802.0
32.5°	8112.2	8021.8	7864.7	7503.1	7362.9	7120.0	7138.0	7156.1	7635.3	7505.3	4881.1
35°	9199.4	9194.9	8887.5	8400.4	8059.1	7757.4	7678.3	7692.9	8068.2	8027.5	5056.3
37.5°	10508.2	10526.2	10175.9	9685.4	9057.0	8577.9	8415.1	8417.4	8725.9	8748.5	5323.0
40°	11573.9	11621.4	11412.3	11081.1	10460.7	9711.4	9437.9	9413.0	9650.4	9622.1	5703.9
42.5°	12032.7	12076.8	12154.8	12270.1	11928.8	11310.6	10665.2	10699.1	10771.5	10573.7	6131.1
45°	11807.8	11877.9	12184.2	12896.2	13217.1	13009.2	12239.5	12120.9	11814.6	11607.8	6560.5
47.5°	10870.9	11041.6	11553.5	12739.1	13862.4	14565.4	14016.1	13859.1	12858.9	12362.7	6834.0
50°	9330.5	9340.7	10053.8	11569.4	13527.9	15547.5	15830.0	15712.5	13831.9	12786.5	6971.9
52.5°	6764.0	6986.6	7639.8	9395.0	12079.1	15398.3	16986.2	16937.6	14835.5	13003.5	7170.8
54°	5142.2	5185.1	5766.0	7507.6	10414.4	14579.0	17057.4	17068.7	15333.9	13134.6	7288.4
55°	4215.5	4112.6	4722.9	6395.5	9278.5	13854.5	16824.6	16878.8	15557.7	13202.4	7375.4
57.5°	1998.1	1999.2	2466.0	3373.5	5811.2	10757.9	15401.7	15593.8	15582.5	13318.8	7643.2
60°	1011.5	1018.3	1121.1	1557.3	2870.6	7151.6	12734.6	13192.3	14383.4	13335.8	7731.4
62.5°	707.5	699.6	682.6	749.3	1208.1	3634.6	9480.8	9878.7	12220.3	12690.5	7451.1
65°	605.8	588.8	541.3	531.2	610.3	1447.7	5905.0	6553.8	9330.5	10988.5	6653.2
67.5°	517.6	510.8	467.9	441.9	431.7	630.6	3046.9	3388.2	6377.4	7898.6	5039.3
70°	439.6	436.2	410.2	377.5	349.2	377.5	1130.2	1400.3	3554.3	4252.8	2377.8
72.5°	357.1	360.5	365.0	323.2	293.8	267.8	482.6	561.7	1487.3	1520.1	831.8
75°	313.1	309.7	309.7	281.4	245.2	198.9	265.6	285.9	455.5	422.7	193.3
77.5°	220.4	212.5	248.6	231.7	204.6	141.3	151.4	160.5	188.7	161.6	90.4
80°	152.6	152.6	159.4	207.9	184.2	102.8	92.7	99.5	111.9	96.1	52.0
82.5°	85.9	88.2	104.0	110.8	107.4	68.9	61.0	62.2	74.6	65.5	32.8
85°	10.2	17.0	59.9	58.8	44.1	30.5	33.9	35.0	46.3	40.7	19.2
87.5°	1.1	2.3	12.4	15.8	11.3	12.4	12.4	12.4	15.8	18.1	13.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P453586

CATALOG NUMBER: GALN-SA4C-827-U-AFL-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3721.6	3721.6	3721.6	3721.6	3721.6	3721.6	3721.6	3721.6	3721.6	3721.6	3721.6
2.5°	3736.3	3650.4	3445.8	3208.5	3057.1	2810.7	2602.7	2452.4	2415.1	2342.8	2364.3
5°	3731.8	3553.2	3136.2	2695.4	2225.3	1874.9	1613.9	1408.2	1317.8	1257.9	1216.0
7.5°	3734.0	3454.9	2785.8	2084.0	1522.3	1178.7	936.9	811.4	727.8	692.8	697.3
10°	3740.8	3344.1	2379.0	1543.8	1027.3	761.7	613.7	553.8	525.5	521.0	519.9
12.5°	3756.6	3223.2	1990.2	1146.0	718.8	553.8	497.3	476.9	467.9	467.9	464.5
15°	3773.6	3089.8	1667.0	852.1	553.8	475.8	449.8	439.6	434.0	434.0	432.8
17.5°	3773.6	2936.1	1365.2	661.1	476.9	437.4	417.0	403.5	398.9	398.9	397.8
20°	3749.8	2757.6	1097.4	532.3	432.8	401.2	380.9	366.2	360.5	358.3	357.1
22.5°	3667.3	2519.1	873.6	457.7	396.7	369.6	343.6	326.6	322.1	319.8	321.0
25°	3520.4	2250.1	691.7	402.3	363.9	331.1	308.5	296.1	291.6	291.6	292.7
27.5°	3369.0	1968.7	548.1	360.5	324.4	295.0	276.9	269.0	267.8	271.2	272.4
30°	3228.8	1686.2	444.1	326.6	289.3	264.5	252.0	249.8	249.8	250.9	252.0
32.5°	3072.9	1438.7	371.8	297.2	261.1	239.6	232.8	232.8	235.1	235.1	237.3
35°	2974.6	1226.2	326.6	269.0	239.6	221.5	217.0	218.1	221.5	226.0	228.3
37.5°	2921.4	1056.7	297.2	246.4	219.2	206.8	202.3	204.6	212.5	220.4	221.5
40°	2926.0	929.0	273.5	227.2	203.4	189.9	186.5	193.3	201.2	209.1	210.2
42.5°	2975.7	834.1	250.9	204.6	189.9	170.7	169.5	176.3	179.7	187.6	188.7
45°	3034.5	765.1	227.2	180.8	165.0	148.0	149.2	154.8	159.4	171.8	174.0
47.5°	3052.5	717.6	200.0	153.7	135.6	130.0	131.1	134.5	143.5	154.8	156.0
50°	3072.9	688.3	174.0	130.0	115.3	114.1	115.3	117.5	123.2	127.7	126.6
52.5°	3159.9	687.1	152.6	113.0	98.3	100.6	101.7	100.6	96.1	89.3	87.0
54°	3241.3	690.5	142.4	105.1	90.4	93.8	92.7	87.0	75.7	68.9	65.5
55°	3306.8	693.9	136.7	99.5	85.9	87.0	88.2	76.9	62.2	55.4	53.1
57.5°	3435.7	686.0	123.2	87.0	75.7	71.2	70.1	50.9	33.9	29.4	27.1
60°	3371.2	619.3	111.9	74.6	64.4	57.6	47.5	28.3	17.0	12.4	12.4
62.5°	3118.1	525.5	99.5	61.0	53.1	44.1	24.9	15.8	7.9	4.5	3.4
65°	2789.2	441.9	89.3	48.6	41.8	28.3	13.6	10.2	3.4	0.0	0.0
67.5°	2073.8	327.7	75.7	38.4	31.6	18.1	9.0	5.7	1.1	0.0	0.0
70°	960.6	200.0	64.4	29.4	22.6	13.6	6.8	3.4	0.0	0.0	0.0
72.5°	275.8	125.4	53.1	21.5	15.8	11.3	5.7	2.3	1.1	0.0	0.0
75°	96.1	100.6	39.6	15.8	12.4	7.9	4.5	2.3	1.1	0.0	0.0
77.5°	57.6	81.4	24.9	13.6	10.2	6.8	4.5	2.3	1.1	1.1	0.0
80°	32.8	54.2	15.8	11.3	9.0	5.7	3.4	2.3	1.1	1.1	0.0
82.5°	18.1	26.0	12.4	10.2	7.9	5.7	3.4	2.3	1.1	1.1	1.1
85°	14.7	13.6	10.2	9.0	6.8	4.5	3.4	1.1	0.0	0.0	0.0
87.5°	11.3	9.0	9.0	9.0	6.8	4.5	3.4	1.1	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)