

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: P299630

Luminaire Tested: **GLNA-AF-10-LED-E1-SL2-7030-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299630  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-10-LED-E1-SL2-7030-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(10) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II  
w/Spill Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 42877.7 lumens  
Efficiency: N/A  
Efficacy: 76.8 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G5

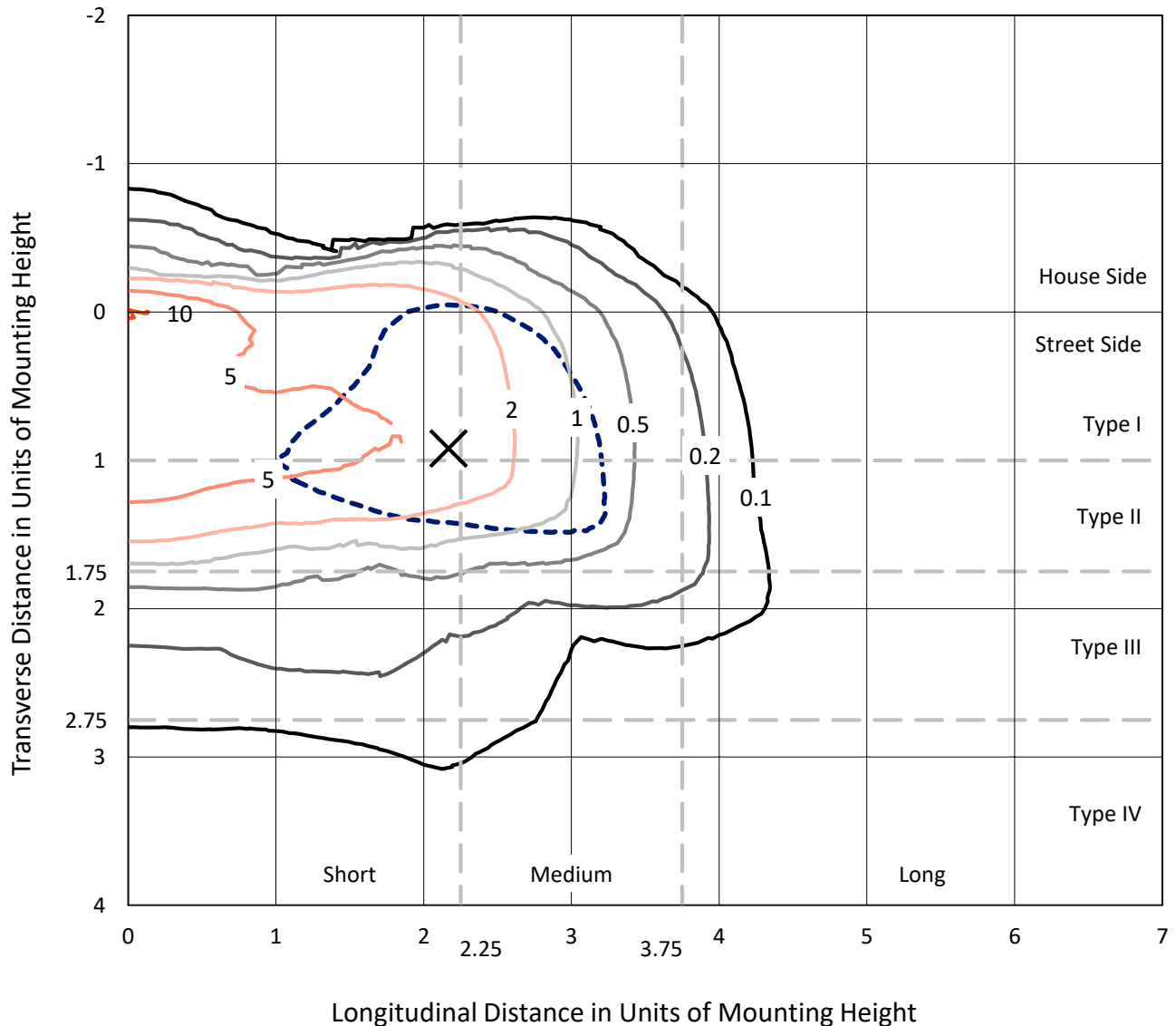
Input Watts (W): 558  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P299630  
 CATALOG NUMBER: GLNA-AF-10-LED-E1-SL2-7030-HSS

### Iso-Footcandle Lines of Horizontal Illumination

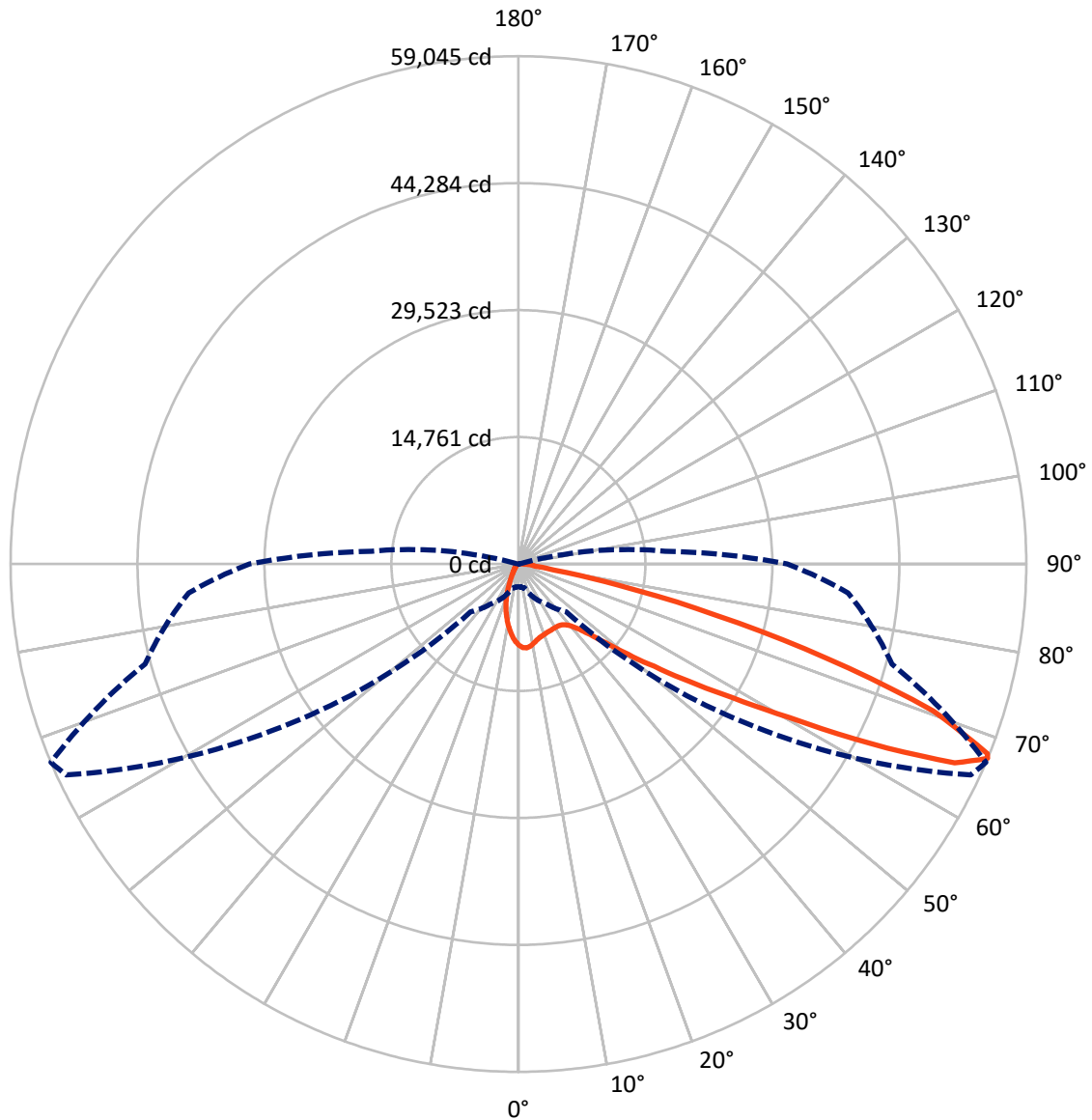
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.5 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P299630  
CATALOG NUMBER: GLNA-AF-10-LED-E1-SL2-7030-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral      - - - Horizontal Cone Through 67-Deg Vertical

REPORT NUMBER: P299630

CATALOG NUMBER: GLNA-AF-10-LED-E1-SL2-7030-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4452.0	0.0	4452.0
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	38425.7	0.0	38425.7
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	42877.7	0.0	42877.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	769.4	1.8
10°-20°	1637.6	3.8
20°-30°	2381.0	5.6
30°-40°	3714.4	8.7
40°-50°	6579.9	15.3
50°-60°	10412.1	24.3
60°-70°	11925.6	27.8
70°-80°	4946.7	11.5
80°-90°	511.0	1.2
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°	42877.7	100.0
0°-180°	42877.7	100.0

**Coefficient of Utilization**



REPORT NUMBER: P299630

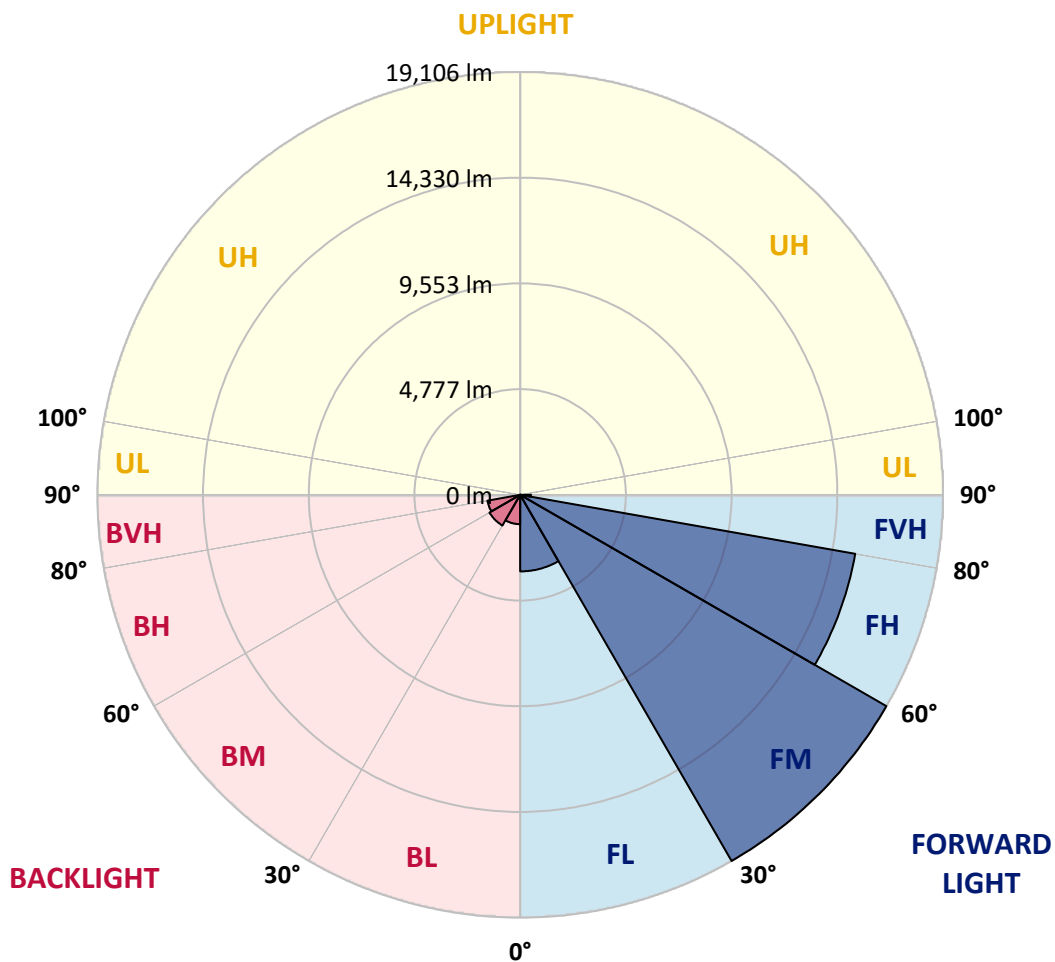
CATALOG NUMBER: GLNA-AF-10-LED-E1-SL2-7030-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3459.6	8.1			
FM (30°-60°)	19106.4	44.6			
FH (60°-80°)	15371.8	35.9			G5
FVH (80°-90°)	488.0	1.1			G3/500
BL (0°-30°)	1328.5	3.1	B3/2500		
BM (30°-60°)	1600.0	3.7	B2/2500		
BH (60°-80°)	1500.5	3.5	B3/2500		G3/2500
BVH (80°-90°)	23.0	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type II Short





REPORT NUMBER: P299630

CATALOG NUMBER: GLNA-AF-10-LED-E1-SL2-7030-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	9456.1	9456.1	9456.1	9456.1	9456.1	9456.1	9456.1	9456.1	9456.1	9456.1	9456.1
2.5°	9776.2	9796.3	9793.8	9808.8	9843.8	9846.3	9811.3	9743.7	9728.7	9641.2	9488.6
5°	9016.0	9073.5	9108.5	9251.0	9411.1	9603.7	9748.7	9801.3	9793.8	9731.2	9501.1
7.5°	8148.1	8205.6	8245.7	8413.2	8625.8	8955.9	9333.6	9643.7	9671.2	9738.7	9491.1
10°	7570.4	7580.4	7635.4	7795.5	8018.1	8355.7	8805.9	9348.6	9431.1	9678.7	9466.1
12.5°	7095.2	7102.7	7175.2	7347.8	7585.4	7925.5	8398.2	9026.0	9153.5	9603.7	9461.1
15°	6757.6	6785.1	6850.1	7030.2	7282.8	7620.4	8105.6	8788.4	8940.9	9576.2	9506.1
17.5°	6645.0	6675.1	6695.1	6825.1	7055.2	7385.3	7883.0	8633.3	8805.9	9591.2	9593.7
20°	6762.6	6785.1	6740.1	6772.6	6915.1	7210.3	7695.4	8500.8	8705.8	9608.7	9706.2
22.5°	7200.3	7210.3	7087.7	6945.2	6920.2	7082.7	7547.9	8395.7	8615.8	9656.2	9838.8
25°	7950.5	7933.0	7733.0	7425.3	7135.2	7060.2	7460.4	8330.7	8570.8	9706.2	9976.3
27.5°	8855.9	8880.9	8605.8	8158.1	7605.4	7210.3	7447.9	8303.2	8550.8	9741.2	10096.4
30°	9956.3	9991.3	9676.2	9113.5	8320.7	7580.4	7562.9	8298.2	8538.3	9718.7	10106.4
32.5°	11079.2	11121.8	10874.2	10293.9	9276.1	8200.6	7823.0	8353.2	8563.3	9641.2	10048.8
35°	12254.7	12314.7	12149.7	11652.0	10571.5	9096.0	8280.7	8520.8	8680.8	9633.7	9991.3
37.5°	13877.8	13932.8	13622.7	13095.0	12139.6	10296.4	9016.0	8835.9	8958.4	9753.7	10006.3
40°	16301.2	16293.7	15493.4	14685.6	13862.8	11822.0	10048.8	9406.1	9468.6	10116.4	10191.4
42.5°	18942.3	18929.7	17746.8	16518.8	15776.0	13700.2	11406.9	10391.5	10349.0	10784.1	10671.6
45°	20978.0	20975.5	20010.2	18627.1	18079.4	15856.1	13162.5	11762.0	11697.0	11869.5	11556.9
47.5°	21845.9	21860.9	21375.7	20402.8	20632.9	18772.2	15375.9	13747.8	13650.2	13580.2	13105.0
50°	21170.6	21200.6	21240.6	21050.6	22506.1	22691.2	18344.5	16546.3	16498.8	16186.2	15443.4
52.5°	18964.8	19117.3	19587.5	20190.2	23156.4	26452.6	22998.8	20022.7	19767.6	19434.9	18617.1
55°	15248.3	15415.9	16308.7	17771.8	22188.5	28923.6	29521.3	24504.4	24079.2	23086.3	21905.9
57.5°	10091.4	10351.5	11647.0	13507.7	19377.4	29321.2	36028.8	30724.3	29243.7	26525.2	25194.6
60°	5559.6	5809.7	7215.3	8900.9	13995.4	27355.5	40405.5	38822.4	36206.4	30369.1	29188.7
62.5°	3423.8	3558.9	4596.8	6164.9	8393.2	21590.8	41310.8	48998.8	45970.1	35318.5	34013.0
65°	2726.0	2783.6	3291.3	5039.4	6017.3	12842.4	38387.2	56756.7	55746.3	41310.8	38332.2
67°	2646.0	2668.5	2908.6	4326.7	5672.2	7873.0	32159.8	58019.7	59045.1	44937.2	38467.2
67.5°	2663.5	2688.5	2916.1	4129.1	5662.2	7235.3	30014.0	57522.0	58817.5	45224.8	37869.5
70°	2568.5	2646.0	3338.8	4126.6	5384.6	6012.3	17974.4	49839.1	51187.1	42021.1	32132.3
72.5°	910.3	915.4	1443.1	3338.8	5854.7	6077.3	9026.0	36536.5	37534.4	32144.8	23166.4
75°	540.2	460.2	480.2	950.4	5594.6	5902.3	5207.0	23346.4	23719.1	18419.6	11732.0
77.5°	372.6	325.1	335.1	420.2	2130.8	5819.7	4136.6	12174.7	11777.0	6460.0	2498.5
80°	212.6	187.6	200.1	367.6	775.3	5429.6	3901.5	4936.9	4209.1	1095.4	690.3
82.5°	112.5	95.0	115.0	302.6	540.2	3383.8	3909.0	2385.9	1890.7	370.1	470.2
85°	40.0	32.5	55.0	207.6	360.1	1037.9	3623.9	2005.8	1575.6	180.1	357.6
87.5°	7.5	7.5	22.5	85.0	145.1	317.6	2143.3	1190.5	797.8	107.5	245.1
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: P299630

CATALOG NUMBER: GLNA-AF-10-LED-E1-SL2-7030-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	9456.1	9456.1	9456.1	9456.1	9456.1	9456.1	9456.1	9456.1	9456.1	9456.1	9456.1
2.5°	9426.1	9318.6	9173.5	8995.9	8785.9	8600.8	8463.2	8320.7	8290.7	8240.7	8233.2
5°	9363.6	9178.5	8818.4	8405.7	7965.6	7567.9	7245.3	6957.7	6830.1	6720.1	6707.6
7.5°	9271.1	8993.4	8380.7	7715.5	7027.7	6402.5	5872.2	5497.1	5152.0	4986.9	4961.9
10°	9163.5	8765.9	7888.0	6965.2	6014.8	5132.0	4344.2	3683.9	3283.8	3046.2	3016.2
12.5°	9063.5	8543.3	7385.3	6187.4	4924.4	3743.9	2731.0	2100.8	1680.6	1510.6	1490.6
15°	9016.0	8363.2	6915.1	5392.1	3783.9	2383.4	1493.1	1155.4	1017.9	977.9	975.4
17.5°	9011.0	8210.6	6455.0	4569.2	2651.0	1385.5	972.9	887.8	860.3	850.3	850.3
20°	9008.4	8065.6	5994.8	3716.4	1683.1	922.9	810.3	790.3	770.3	757.8	757.8
22.5°	9036.0	7935.5	5514.6	2846.1	1060.4	747.8	712.8	692.8	667.8	650.2	647.7
25°	9063.5	7835.5	5024.4	2025.8	767.8	650.2	615.2	587.7	552.7	530.2	527.7
27.5°	9068.5	7710.5	4499.2	1355.5	642.7	567.7	522.7	480.2	440.2	417.7	415.2
30°	8993.4	7500.4	3916.5	915.4	567.7	492.7	432.7	387.6	350.1	332.6	332.6
32.5°	8845.9	7240.3	3276.3	690.3	505.2	422.7	357.6	315.1	290.1	282.6	280.1
35°	8713.3	6960.2	2618.5	585.2	452.7	357.6	292.6	265.1	250.1	247.6	245.1
37.5°	8635.8	6735.1	2000.8	530.2	402.7	300.1	247.6	227.6	220.1	215.1	217.6
40°	8695.8	6547.5	1478.1	485.2	352.6	250.1	210.1	200.1	192.6	190.1	190.1
42.5°	8958.4	6515.0	1097.9	445.2	305.1	207.6	182.6	175.1	170.1	167.6	170.1
45°	9648.7	6715.1	852.8	407.7	257.6	175.1	155.1	152.6	150.1	150.1	150.1
47.5°	10686.6	7127.7	710.3	365.1	215.1	150.1	135.1	132.6	130.0	132.6	132.6
50°	12444.8	7883.0	635.2	322.6	177.6	127.5	115.0	115.0	115.0	115.0	117.5
52.5°	15118.3	9368.6	585.2	280.1	145.1	107.5	97.5	97.5	100.0	100.0	102.5
55°	18096.9	11339.3	540.2	237.6	122.5	90.0	80.0	82.5	85.0	87.5	87.5
57.5°	21328.2	13522.7	502.7	195.1	105.0	72.5	67.5	70.0	72.5	77.5	77.5
60°	25227.2	15886.1	447.7	152.6	87.5	57.5	52.5	57.5	65.0	70.0	72.5
62.5°	29508.8	18172.0	377.6	120.0	72.5	45.0	42.5	52.5	62.5	67.5	70.0
65°	32434.9	18889.7	290.1	97.5	55.0	32.5	35.0	47.5	60.0	67.5	67.5
67°	31249.5	17126.6	237.6	82.5	45.0	25.0	32.5	47.5	60.0	65.0	67.5
67.5°	30426.7	16436.3	227.6	80.0	42.5	25.0	32.5	47.5	60.0	67.5	67.5
70°	24757.0	12347.2	190.1	60.0	35.0	22.5	27.5	45.0	57.5	65.0	65.0
72.5°	17201.6	7612.9	170.1	42.5	30.0	20.0	25.0	42.5	55.0	62.5	65.0
75°	8178.1	2756.1	145.1	32.5	27.5	17.5	22.5	42.5	55.0	62.5	62.5
77.5°	1668.1	640.2	117.5	27.5	22.5	17.5	20.0	40.0	52.5	60.0	60.0
80°	547.7	247.6	87.5	25.0	22.5	17.5	20.0	37.5	52.5	57.5	60.0
82.5°	395.2	125.0	57.5	25.0	22.5	17.5	17.5	37.5	50.0	57.5	57.5
85°	302.6	87.5	37.5	25.0	22.5	17.5	17.5	35.0	47.5	55.0	55.0
87.5°	200.1	35.0	30.0	25.0	22.5	17.5	17.5	35.0	45.0	52.5	55.0
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)