

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: P323958

Luminaire Tested: **GLEON-SA4B-827-U-SL4-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P323958  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA4B-827-U-SL4-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 800mA 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: 13753 lumens  
Efficiency: N/A  
Efficacy: 80.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G3

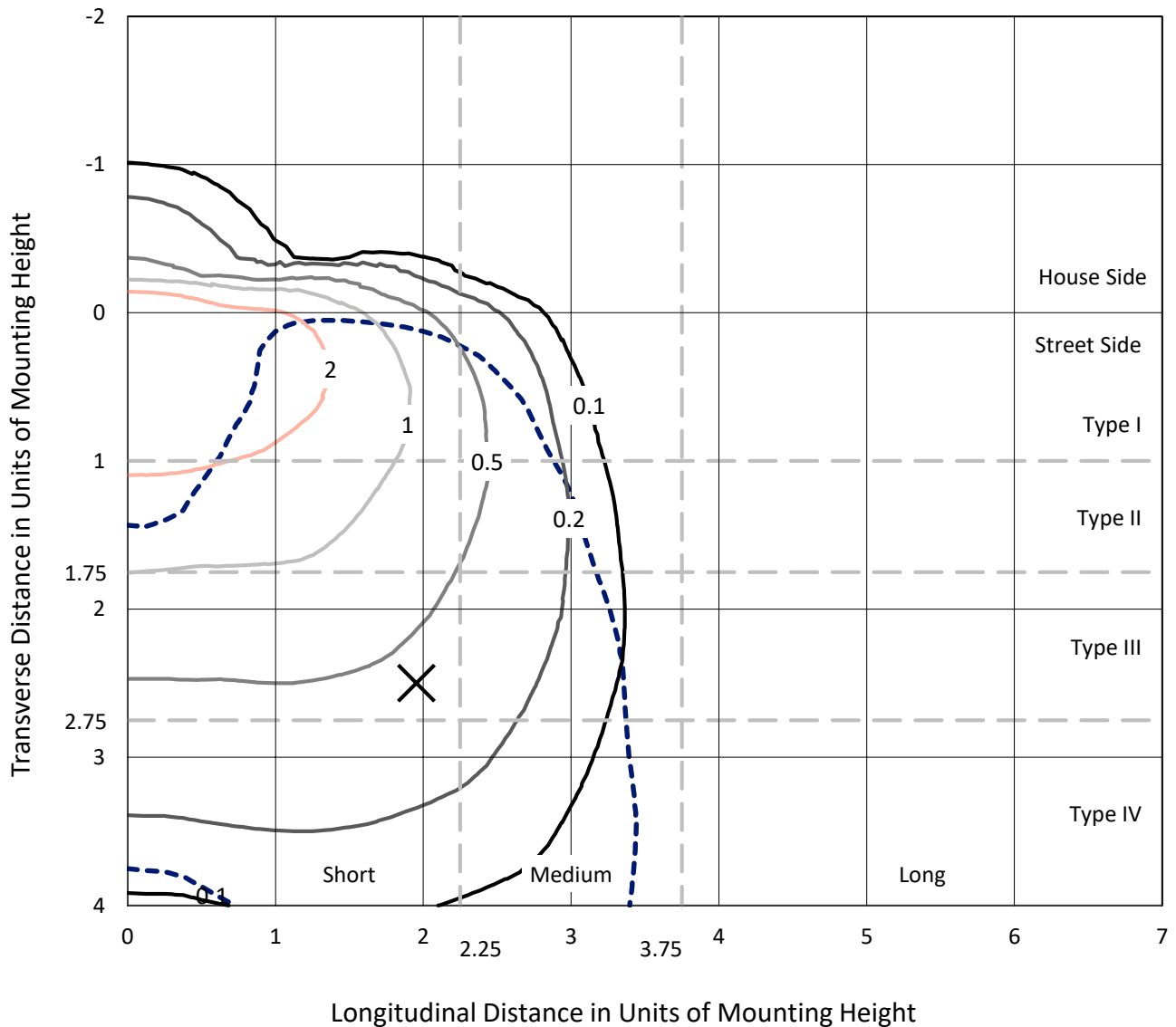
Input Watts (W): 171  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P323958  
 CATALOG NUMBER: GLEON-SA4B-827-U-SL4-HSS

### Iso-Footcandle Lines of Horizontal Illumination

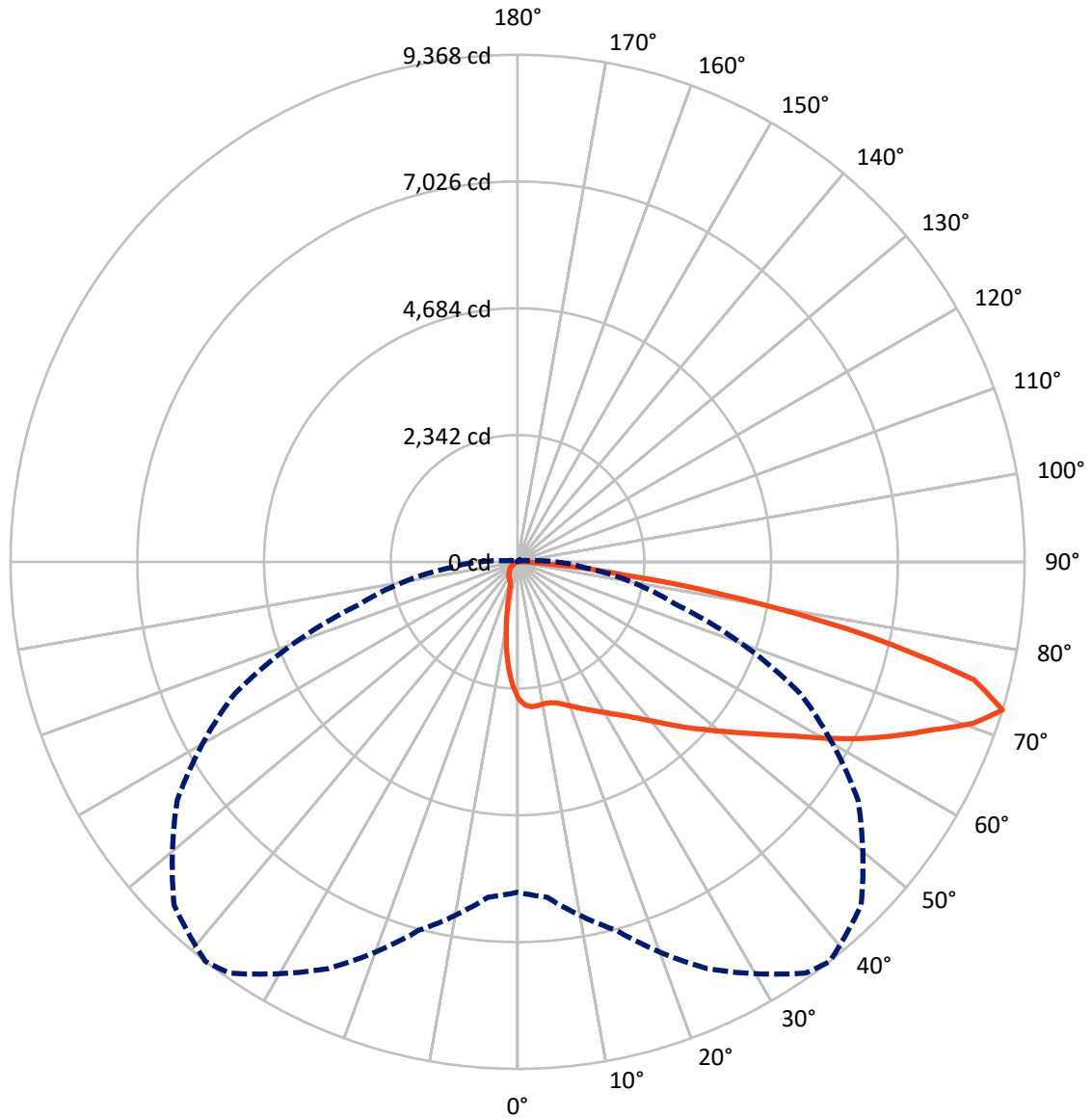
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc  
 Type IV - Short - N/A

REPORT NUMBER: P323958  
CATALOG NUMBER: GLEON-SA4B-827-U-SL4-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P323958  
 CATALOG NUMBER: GLEON-SA4B-827-U-SL4-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1157.4	0.0	1157.4
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	12595.6	0.0	12595.6
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	13753.0	0.0	13753.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	215.5	1.6
10°-20°	527.0	3.8
20°-30°	838.2	6.1
30°-40°	1260.2	9.2
40°-50°	1922.5	14.0
50°-60°	2717.1	19.8
60°-70°	3408.2	24.8
70°-80°	2548.3	18.5
80°-90°	316.0	2.3
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°	13753.0	100.0
0°-180°	13753.0	100.0

**Coefficient of Utilization**



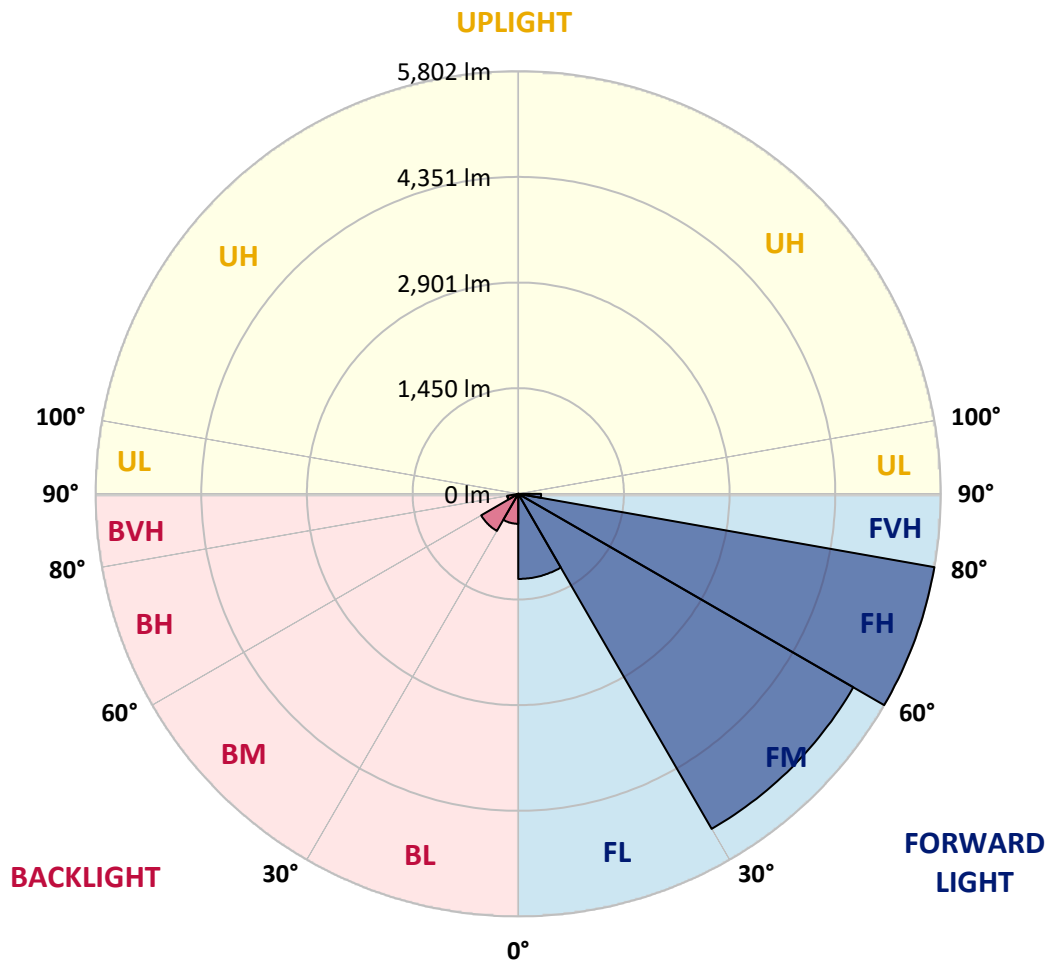
REPORT NUMBER: P323958  
 CATALOG NUMBER: GLEON-SA4B-827-U-SL4-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1168.7	8.5			
FM (30°-60°)	5312.0	38.6			
FH (60°-80°)	5801.9	42.2			G3/7500
FVH (80°-90°)	313.0	2.3			G3/500
BL (0°-30°)	412.1	3.0	B1/500		
BM (30°-60°)	587.7	4.3	B1/1000		
BH (60°-80°)	154.6	1.1	B1/500		G1/500
BVH (80°-90°)	2.9	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-G3**

Type IV Short





REPORT NUMBER: P323958

CATALOG NUMBER: GLEON-SA4B-827-U-SL4-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1
2.5°	2684.5	2685.1	2678.8	2668.5	2655.4	2648.5	2637.1	2618.8	2599.4	2564.5	2526.8
5°	2739.3	2739.3	2731.3	2717.6	2696.5	2690.2	2668.5	2639.4	2599.4	2542.8	2479.4
7.5°	2733.6	2734.8	2723.9	2709.6	2688.5	2682.8	2656.5	2623.9	2574.3	2505.7	2424.6
10°	2703.9	2706.8	2698.2	2691.3	2671.9	2665.6	2641.1	2608.5	2558.8	2485.7	2392.6
12.5°	2673.6	2676.5	2679.3	2685.6	2673.6	2671.4	2651.9	2624.5	2577.1	2501.1	2396.0
15°	2654.2	2659.9	2680.5	2705.1	2707.9	2705.6	2693.1	2667.4	2619.4	2540.6	2420.6
17.5°	2654.2	2663.4	2706.2	2753.0	2769.6	2771.3	2760.5	2724.5	2667.4	2582.8	2443.5
20°	2676.5	2689.1	2755.9	2822.1	2849.6	2849.6	2828.4	2778.2	2711.3	2621.1	2458.9
22.5°	2733.6	2750.2	2834.1	2910.7	2939.8	2933.5	2905.0	2831.9	2757.0	2664.5	2478.3
25°	2846.1	2858.7	2946.1	3023.2	3040.9	3026.6	2990.6	2897.0	2815.3	2723.3	2513.7
27.5°	2991.2	2992.9	3083.2	3148.3	3137.4	3127.7	3082.6	2978.6	2899.2	2807.3	2574.8
30°	3150.6	3150.6	3230.0	3279.6	3246.5	3238.5	3193.4	3077.5	3006.6	2921.5	2661.6
32.5°	3304.8	3311.6	3376.2	3407.6	3370.5	3362.5	3318.5	3202.5	3149.4	3095.7	2797.0
35°	3453.9	3459.0	3520.1	3537.2	3501.8	3504.1	3472.7	3374.5	3354.5	3347.6	3000.9
37.5°	3598.4	3599.5	3661.8	3672.6	3654.9	3674.3	3677.2	3590.4	3627.5	3682.9	3288.2
40°	3730.3	3731.4	3793.1	3821.1	3851.4	3876.5	3898.8	3852.5	3975.3	4103.8	3630.3
42.5°	3836.0	3848.0	3926.2	3979.3	4059.3	4107.3	4167.8	4165.5	4389.4	4582.5	4043.9
45°	3929.1	3949.6	4058.7	4151.8	4288.9	4365.4	4460.2	4534.5	4855.5	5115.4	4462.5
47.5°	4051.9	4071.3	4195.8	4348.3	4531.1	4631.6	4788.7	4949.2	5367.8	5638.6	4871.5
50°	4224.9	4216.4	4339.2	4557.9	4792.7	4924.6	5148.5	5389.0	5876.2	6094.4	5112.0
52.5°	4409.4	4406.0	4496.8	4785.8	5101.1	5255.3	5551.2	5843.6	6362.2	6408.5	5222.2
55°	4637.9	4613.3	4689.9	5045.7	5467.2	5632.9	5981.3	6293.7	6749.5	6585.6	5277.6
57.5°	4877.2	4836.6	4909.8	5335.3	5880.2	6076.1	6457.6	6732.4	7007.1	6706.7	5277.0
60°	5124.5	5076.5	5163.4	5697.4	6393.1	6619.8	6974.0	7028.8	7247.5	6767.8	5238.2
62.5°	5331.3	5302.7	5431.8	6084.7	6966.0	7188.7	7364.1	7298.4	7450.3	6815.2	5147.4
65°	5550.0	5551.8	5760.2	6536.4	7574.8	7725.0	7739.9	7647.9	7620.0	6805.5	4840.1
67.5°	5845.9	5873.3	6221.2	7149.9	8167.1	8283.1	8281.9	8026.6	7743.9	6419.4	4158.7
70°	6158.9	6223.4	6752.3	7851.8	8813.7	8931.4	8870.8	8267.7	7291.5	5190.8	2943.2
72.5°	6106.4	6218.3	7047.6	8294.5	9278.1	9367.7	8974.2	7675.4	5763.1	3016.9	1253.1
75°	4711.0	4840.6	6462.2	7855.8	8790.8	8710.3	7710.8	5972.7	3149.4	841.9	282.2
77.5°	2488.6	2557.7	4268.9	5984.7	6854.6	6686.1	5431.8	3313.3	960.1	208.5	126.8
80°	1303.4	1319.4	1860.3	3395.6	4230.6	4231.8	3219.1	1455.3	395.8	106.8	85.1
82.5°	698.0	711.7	983.0	1569.0	2216.7	2009.4	1232.6	800.8	230.2	60.5	81.7
85°	167.9	170.8	557.5	716.8	871.6	622.6	366.1	672.3	62.3	35.4	66.3
87.5°	64.5	65.7	206.8	310.1	222.2	143.9	171.4	250.7	8.0	13.7	10.3
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: P323958

CATALOG NUMBER: GLEON-SA4B-827-U-SL4-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1	2529.1
2.5°	2504.0	2489.1	2452.6	2406.3	2365.2	2335.5	2291.0	2261.8	2242.4	2241.8	2234.4
5°	2440.6	2410.3	2331.5	2237.8	2152.7	2076.2	1986.0	1914.6	1861.4	1852.9	1834.6
7.5°	2372.6	2322.9	2201.9	2055.6	1912.8	1767.8	1599.3	1494.7	1405.1	1362.2	1357.7
10°	2330.9	2261.3	2089.3	1878.0	1654.1	1418.2	1197.7	1045.2	935.0	903.6	880.2
12.5°	2322.4	2230.4	2002.5	1711.2	1391.4	1079.5	835.6	673.4	585.4	557.5	550.0
15°	2330.9	2216.1	1929.4	1546.2	1125.2	765.9	560.9	466.6	433.5	425.5	424.9
17.5°	2336.1	2199.0	1846.6	1362.8	867.0	547.2	429.5	402.1	397.0	396.4	397.5
20°	2335.5	2172.7	1747.8	1158.3	644.8	430.1	388.4	382.7	381.5	382.1	381.5
22.5°	2331.5	2141.9	1639.3	947.6	487.2	384.4	370.7	367.3	366.7	366.7	366.7
25°	2338.9	2117.3	1519.9	745.9	401.5	363.3	354.7	351.8	351.3	351.3	350.1
27.5°	2365.8	2103.6	1389.1	574.0	362.7	344.4	337.6	337.0	335.3	334.7	335.8
30°	2409.2	2103.6	1245.7	446.7	339.3	325.0	319.9	318.7	318.1	317.6	318.1
32.5°	2485.7	2119.6	1089.2	371.3	317.0	303.3	299.9	301.6	299.9	299.9	299.9
35°	2623.9	2167.6	925.3	323.9	293.6	282.2	278.7	281.0	279.9	279.9	279.3
37.5°	2825.6	2256.7	760.2	295.3	273.0	261.0	256.5	259.9	258.7	258.7	258.2
40°	3071.2	2386.3	603.2	273.6	253.0	240.5	236.5	238.2	235.3	235.3	236.5
42.5°	3374.5	2550.8	466.1	252.5	233.0	221.0	218.8	217.0	211.9	209.0	209.6
45°	3711.4	2722.2	363.3	231.9	214.2	204.5	201.1	196.5	187.9	182.2	182.8
47.5°	4012.5	2854.1	295.3	211.9	197.1	189.6	184.5	175.9	163.4	156.5	157.1
50°	4170.7	2874.1	251.3	191.9	181.1	173.6	166.2	153.1	138.2	130.8	130.2
52.5°	4211.2	2780.4	218.8	173.6	165.1	156.5	146.8	129.1	112.5	104.5	103.4
55°	4226.1	2637.7	189.6	156.5	147.9	138.2	125.7	105.7	90.2	82.2	81.7
57.5°	4177.0	2424.6	166.8	141.1	130.8	118.8	103.4	84.5	69.7	63.4	63.4
60°	4067.9	2136.2	149.1	124.5	113.1	99.4	83.4	65.7	52.0	46.8	46.8
62.5°	3850.2	1762.6	132.5	107.4	96.5	82.2	67.4	49.7	36.6	33.7	34.3
65°	3439.6	1337.1	115.9	92.0	82.2	68.0	52.5	35.4	24.6	24.6	25.7
67.5°	2805.0	928.7	98.8	78.2	70.8	55.4	40.0	24.6	17.1	19.4	21.7
70°	1856.9	520.9	84.5	64.5	60.5	44.0	29.7	16.6	13.7	18.3	22.3
72.5°	700.8	202.8	70.8	52.0	52.5	33.7	21.1	12.6	12.6	20.0	26.3
75°	195.3	99.4	50.8	38.3	41.1	24.6	15.4	10.9	12.0	22.8	30.8
77.5°	114.8	73.1	33.1	22.3	28.0	17.1	10.3	8.6	10.3	19.4	29.7
80°	92.5	38.8	19.4	11.4	15.4	9.7	6.9	5.1	2.9	7.4	15.4
82.5°	92.5	23.4	9.1	8.0	8.0	5.1	3.4	2.3	0.6	0.0	4.0
85°	62.3	9.7	5.7	5.1	4.0	1.7	1.1	0.6	0.0	0.0	0.0
87.5°	10.3	4.0	2.3	1.1	0.6	0.0	0.0	0.0	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)