

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: P457551

Luminaire Tested: **GALN-SA8D-827-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P457551  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA8D-827-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 46993 lumens  
Efficiency: N/A  
Efficacy: 95.3 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G5

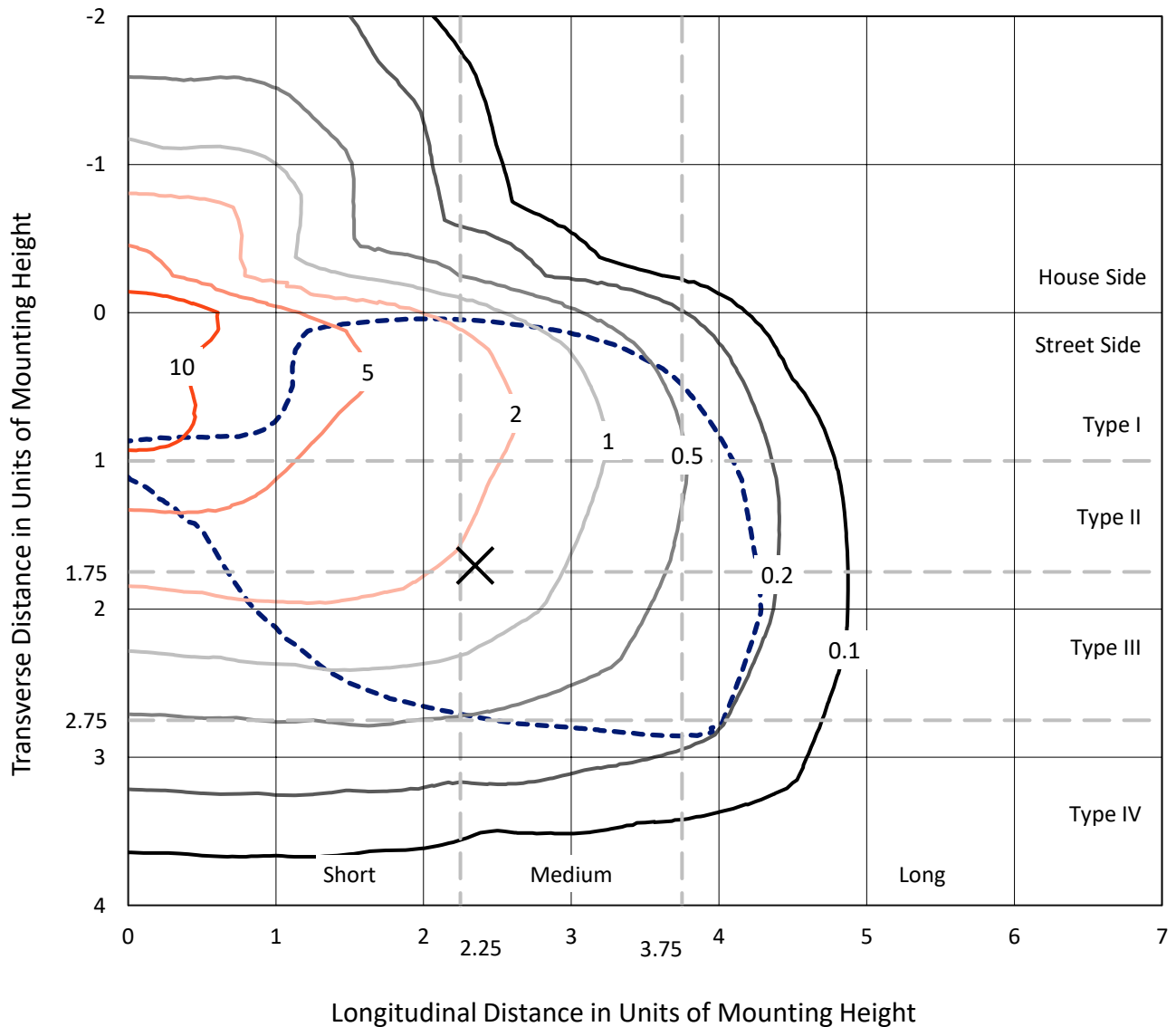
Input Watts (W): 493  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P457551  
 CATALOG NUMBER: GALN-SA8D-827-U-T3R

### Iso-Footcandle Lines of Horizontal Illumination

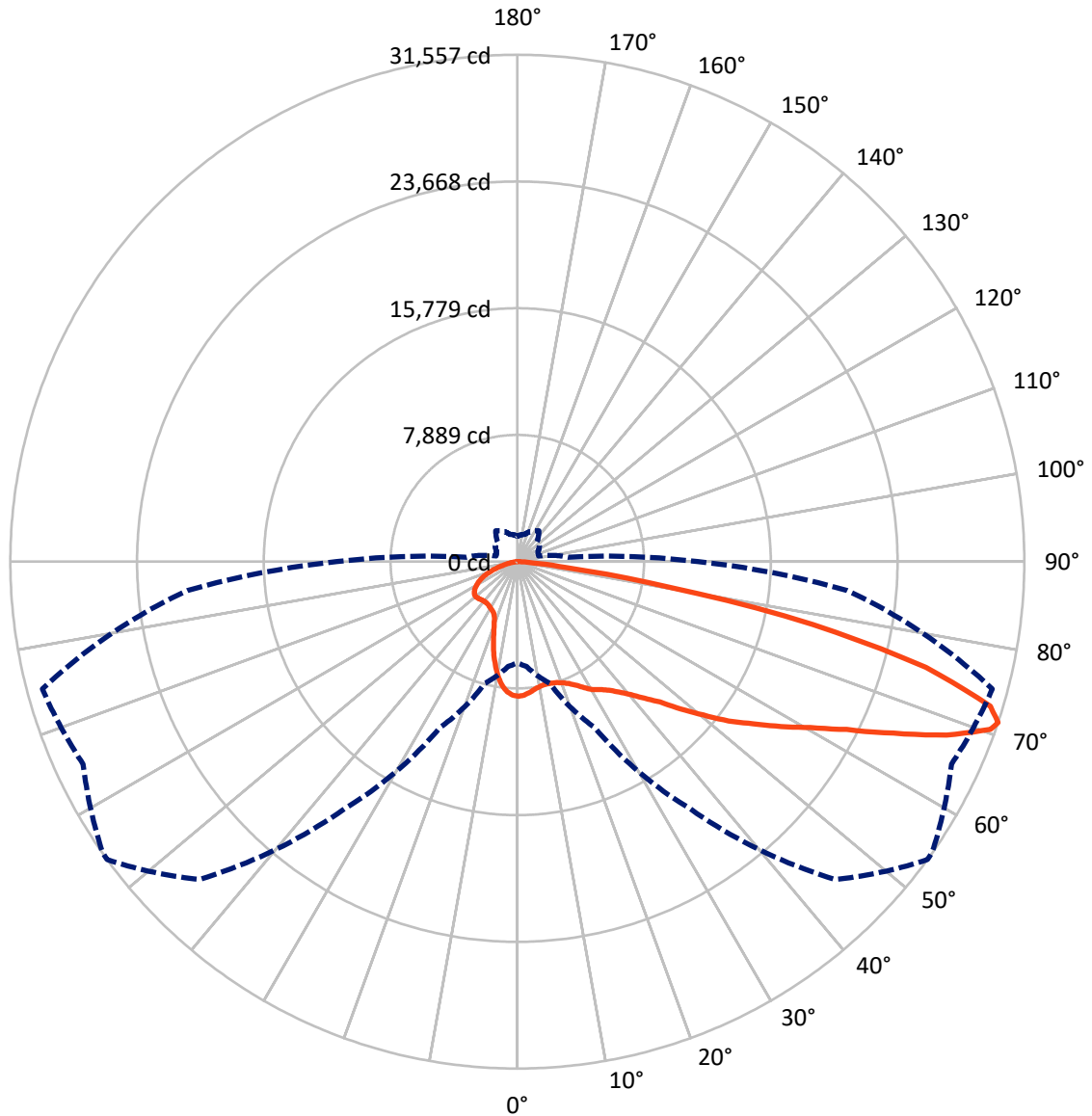
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.5 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P457551  
CATALOG NUMBER: GALN-SA8D-827-U-T3R

### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

REPORT NUMBER: P457551

CATALOG NUMBER: GALN-SA8D-827-U-T3R

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8484.3	0.0	8484.3
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	38508.7	0.0	38508.7
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	46993.0	0.0	46993.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	747.2	1.6
10°-20°	1972.9	4.2
20°-30°	3284.9	7.0
30°-40°	4857.3	10.3
40°-50°	6841.7	14.6
50°-60°	9161.4	19.5
60°-70°	11547.2	24.6
70°-80°	7886.7	16.8
80°-90°	693.6	1.5
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°	46993.0	100.0
0°-180°	46993.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P457551

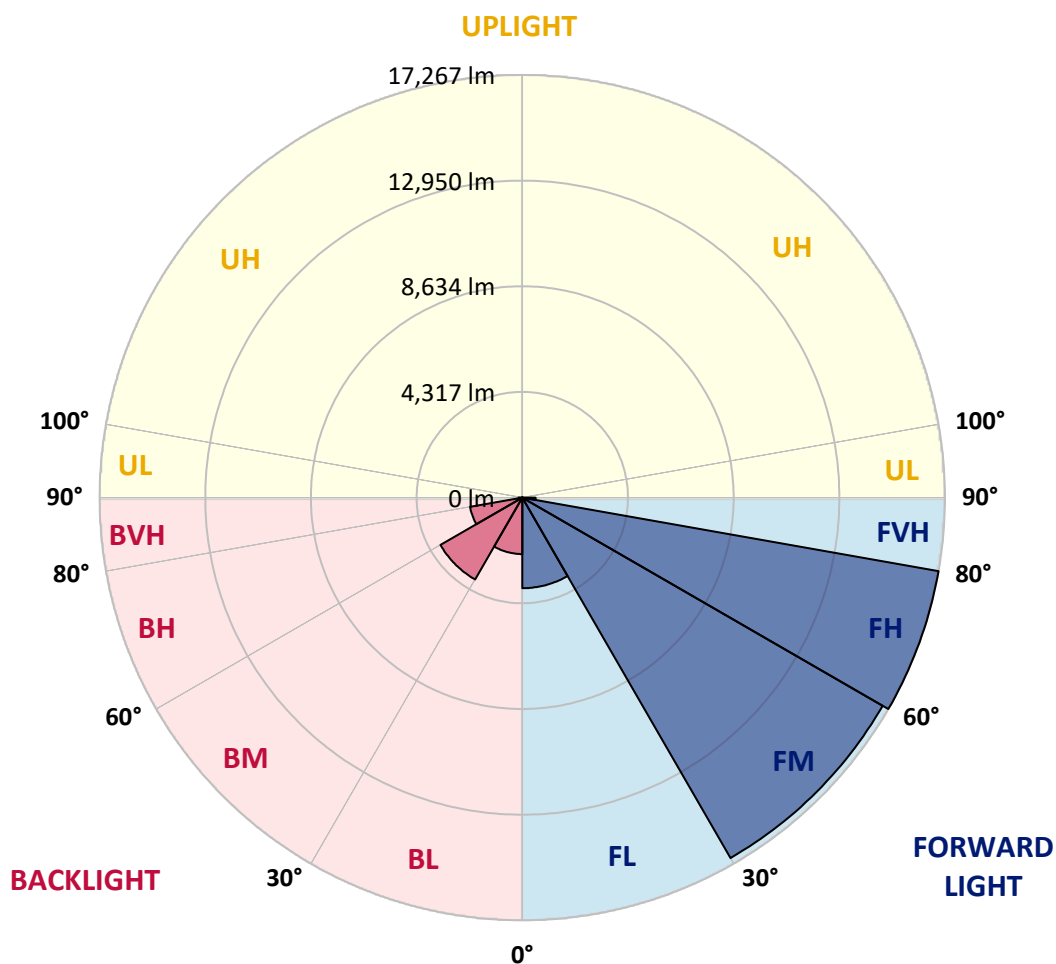
CATALOG NUMBER: GALN-SA8D-827-U-T3R

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3699.1	7.9			
FM	(30°-60°)	17000.4	36.2			
FH	(60°-80°)	17267.1	36.7			G5
FVH	(80°-90°)	542.1	1.2			G4/750
BL	(0°-30°)	2305.9	4.9	B3/2500		
BM	(30°-60°)	3860.1	8.2	B3/5000		
BH	(60°-80°)	2166.9	4.6	B3/2500		G3/2500
BVH	(80°-90°)	151.4	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

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

Type IV Medium





REPORT NUMBER: P457551

CATALOG NUMBER: GALN-SA8D-827-U-T3R

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	8384.2	8384.2	8384.2	8384.2	8384.2	8384.2	8384.2	8384.2	8384.2	8384.2	8384.2
2.5°	8099.9	8138.0	8148.2	8173.6	8226.9	8270.0	8313.2	8308.1	8369.0	8394.4	8417.2
5°	7739.5	7749.7	7787.7	7838.5	7932.4	8051.7	8168.5	8171.0	8320.8	8440.1	8498.5
7.5°	7475.5	7508.5	7533.9	7587.2	7686.2	7815.7	8001.0	8016.2	8282.7	8518.8	8643.2
10°	7302.9	7341.0	7368.9	7434.9	7533.9	7678.6	7879.1	7907.0	8254.8	8643.2	8861.5
12.5°	7145.5	7183.6	7209.0	7295.3	7424.7	7602.4	7828.3	7861.3	8264.9	8787.8	9100.1
15°	7242.0	7272.4	7262.3	7287.7	7374.0	7577.0	7848.7	7881.6	8303.0	8927.5	9336.1
17.5°	7671.0	7696.3	7612.6	7516.1	7475.5	7625.3	7912.1	7947.6	8379.2	9072.1	9577.3
20°	8303.0	8371.6	8188.8	7973.0	7777.6	7797.9	8044.1	8082.2	8485.8	9216.8	9823.5
22.5°	9125.5	9176.2	8952.8	8597.5	8237.0	8051.7	8242.1	8264.9	8645.7	9404.7	10092.6
25°	10092.6	10123.0	9813.4	9356.4	8836.1	8485.8	8513.7	8554.3	8909.7	9617.9	10331.2
27.5°	11031.8	11128.2	10770.3	10211.9	9526.5	8942.7	8886.8	8912.2	9196.5	9737.2	10496.2
30°	12146.1	12138.5	11760.3	11113.0	10234.7	9440.2	9239.7	9234.6	9351.4	9795.6	10615.5
32.5°	13034.5	13138.6	12768.0	12062.3	11044.5	9955.5	9483.4	9473.2	9470.7	9897.1	10793.2
35°	14044.8	14060.0	13719.9	13009.2	11920.2	10602.8	9823.5	9772.7	9714.4	10115.4	11034.3
37.5°	14948.5	15019.6	14707.3	13910.3	12780.7	11275.5	10290.6	10257.6	10079.9	10493.6	11420.1
40°	15654.1	15707.5	15519.6	14760.6	13628.5	12001.4	10884.5	10823.6	10607.9	11113.0	11935.4
42.5°	15885.1	15994.3	16067.9	15694.8	14603.3	12861.9	11615.6	11539.4	11374.5	12052.2	12529.4
45°	15902.9	16075.5	16463.9	16481.7	15583.1	13892.5	12468.5	12415.2	12402.5	13255.4	13364.5
47.5°	15768.4	15943.5	16595.9	16948.7	16456.3	14933.3	13699.6	13615.8	13623.4	14742.9	14301.2
50°	15443.5	15651.6	16443.6	17248.2	17139.1	16014.6	14999.2	14971.3	15128.7	16441.0	15273.4
52.5°	14831.7	15083.0	16286.2	17436.1	17646.8	16946.2	16476.6	16397.9	16796.4	18283.9	16337.0
55°	13138.6	13516.8	15710.0	17540.2	18129.1	17837.1	17806.7	17948.8	18476.8	20294.3	17507.2
57.5°	12255.3	12539.6	14458.6	17557.9	18738.3	18872.8	19360.2	19395.7	20319.7	22429.1	18829.7
60°	11773.0	12024.3	13773.2	17441.2	19588.6	20154.7	20949.2	21076.1	22119.4	24741.5	20200.4
62.5°	11351.6	11567.4	13362.0	17037.6	20548.1	22055.9	23007.8	23068.7	24162.8	27295.1	21553.3
65°	10359.1	10605.3	12534.5	16634.0	21375.6	24431.8	25739.1	25668.0	26338.2	29498.4	22401.1
67.5°	9021.4	9333.6	10988.6	15240.4	21784.3	27028.6	28815.6	28726.8	28485.6	30942.8	22644.8
70°	7313.1	7480.6	9011.2	12831.5	20152.1	28391.7	31244.8	31150.9	29815.7	31133.1	21492.4
71°	6292.6	6554.1	7846.1	11397.3	18794.1	27975.4	31557.1	31531.7	29818.3	30607.7	20624.3
72.5°	4911.8	5071.7	6213.9	8831.0	15974.0	25609.6	30785.4	30881.8	29171.0	29148.1	18834.7
75°	3107.0	3178.0	3898.9	5198.6	8765.0	18136.7	26279.8	26541.2	25901.6	23858.2	14006.7
77.5°	1804.8	1896.2	2335.3	3063.8	3787.3	9843.8	18804.3	19088.6	17997.1	13136.1	5734.2
80°	1050.9	1152.4	1538.3	1779.4	1738.8	3652.7	9574.7	10059.6	7792.8	3317.7	1609.3
82.5°	583.8	652.4	1081.3	1083.9	926.5	1193.0	3013.0	3152.7	2223.6	1337.7	657.4
85°	423.9	479.8	698.1	632.1	444.2	512.8	1048.3	1099.1	898.6	563.5	213.2
87.5°	149.8	213.2	383.3	304.6	121.8	106.6	302.1	246.2	228.5	157.4	48.2
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: P457551  
 CATALOG NUMBER: GALN-SA8D-827-U-T3R

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8384.2	8384.2	8384.2	8384.2	8384.2	8384.2	8384.2	8384.2	8384.2	8384.2	8384.2
2.5°	8429.9	8435.0	8409.6	8363.9	8318.2	8259.9	8193.9	8143.1	8120.3	8117.7	8115.2
5°	8521.3	8534.0	8437.6	8295.4	8138.0	7945.1	7780.1	7592.3	7544.0	7467.9	7490.7
7.5°	8668.5	8660.9	8470.6	8168.5	7800.4	7391.7	7046.5	6846.0	6637.8	6579.5	6582.0
10°	8879.2	8831.0	8470.6	7909.6	7295.3	6688.6	6206.3	5901.7	5736.7	5599.7	5548.9
12.5°	9102.6	8980.8	8389.3	7546.6	6645.5	5901.7	5383.9	4972.7	4866.1	4754.4	4756.9
15°	9315.8	9112.8	8229.4	7036.4	5944.9	5061.5	4558.9	4312.7	4279.7	4292.4	4289.9
17.5°	9508.7	9206.7	7985.7	6467.8	5127.5	4340.6	4074.1	4091.9	4180.7	4244.2	4251.8
20°	9704.2	9262.5	7622.7	5706.3	4355.8	3904.0	3914.2	4053.8	4188.3	4274.6	4287.3
22.5°	9889.5	9287.9	7196.3	4970.1	3797.4	3718.7	3868.5	4018.2	4150.2	4234.0	4246.7
25°	10011.3	9229.5	6592.2	4201.0	3523.3	3652.7	3810.1	3937.0	4048.7	4135.0	4155.3
27.5°	10044.3	9041.7	5843.3	3579.1	3396.3	3589.3	3733.9	3827.9	3914.2	3995.4	4010.6
30°	10026.6	8765.0	5020.9	3213.6	3322.7	3515.6	3627.3	3695.9	3799.9	3863.4	3876.1
32.5°	9998.7	8442.6	4162.9	3018.1	3261.8	3447.1	3513.1	3574.0	3571.5	3546.1	3563.9
35°	10008.8	8056.8	3467.4	2901.4	3208.5	3396.3	3452.2	3376.0	3157.7	3147.6	3137.4
37.5°	10062.1	7676.0	2962.3	2820.1	3180.6	3388.7	3419.2	3068.9	2876.0	2787.1	2764.3
40°	10199.2	7231.8	2629.8	2759.2	3178.0	3447.1	3269.4	2914.1	2543.5	2370.8	2358.1
42.5°	10381.9	6795.2	2426.7	2721.1	3208.5	3536.0	3208.5	2695.8	2292.2	2190.6	2175.4
45°	10653.6	6295.2	2315.0	2703.4	3254.2	3569.0	3188.2	2535.8	2190.6	2109.4	2109.4
47.5°	10960.7	5818.0	2254.1	2690.7	3312.6	3546.1	3008.0	2485.1	2142.4	2152.5	2200.8
50°	11265.3	5404.2	2208.4	2662.8	3363.3	3533.4	2934.4	2482.5	2155.1	2284.5	2370.8
52.5°	11618.1	5112.3	2152.5	2617.1	3363.3	3452.2	2911.5	2533.3	2190.6	2228.7	2266.8
55°	12044.6	5020.9	2081.5	2518.1	3302.4	3249.1	2898.8	2606.9	2216.0	2127.2	2142.4
57.5°	12608.1	5168.1	2012.9	2393.7	3162.8	3038.4	2893.7	2627.2	2157.6	2084.0	2068.8
60°	13263.0	5460.0	1992.6	2266.8	2972.4	2858.2	2863.3	2568.8	2076.4	2000.2	2012.9
62.5°	13722.4	5635.2	1979.9	2170.3	2764.3	2660.2	2789.7	2497.8	2040.9	1974.9	1987.5
65°	13722.4	5422.0	1863.2	2023.1	2495.2	2421.6	2700.8	2408.9	1995.2	1919.0	1906.3
67.5°	13202.1	4800.1	1685.5	1802.2	2198.2	2150.0	2576.4	2302.3	1926.6	1868.2	1837.8
70°	11846.6	3640.0	1462.1	1543.3	1822.6	1865.7	2416.5	2157.6	1812.4	1741.3	1695.6
71°	11250.1	3170.4	1368.2	1411.3	1677.9	1741.3	2340.4	2096.7	1761.6	1660.1	1578.9
72.5°	10100.2	2670.4	1226.0	1243.8	1434.2	1548.4	2180.5	1979.9	1665.2	1520.5	1429.1
75°	7673.5	1949.5	987.4	977.3	1061.0	1228.6	1845.4	1764.2	1459.6	1264.1	1210.8
77.5°	3315.1	1061.0	738.7	746.3	720.9	931.6	1451.9	1515.4	1251.4	1028.0	979.8
80°	1005.2	611.7	505.1	515.3	482.3	624.4	1023.0	1188.0	1005.2	799.6	733.6
82.5°	515.3	365.5	345.2	340.1	307.1	352.8	619.4	812.3	718.4	500.1	441.7
85°	223.4	195.5	170.1	165.0	144.7	126.9	220.8	406.1	380.8	279.2	266.5
87.5°	55.8	50.8	33.0	30.5	17.8	2.5	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)