

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: P458502

Luminaire Tested: **GALN-SA9D-830-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P458502
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA9D-830-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 56046 lumens
Efficiency: N/A
Efficacy: 101.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G5

Input Watts (W): 552
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

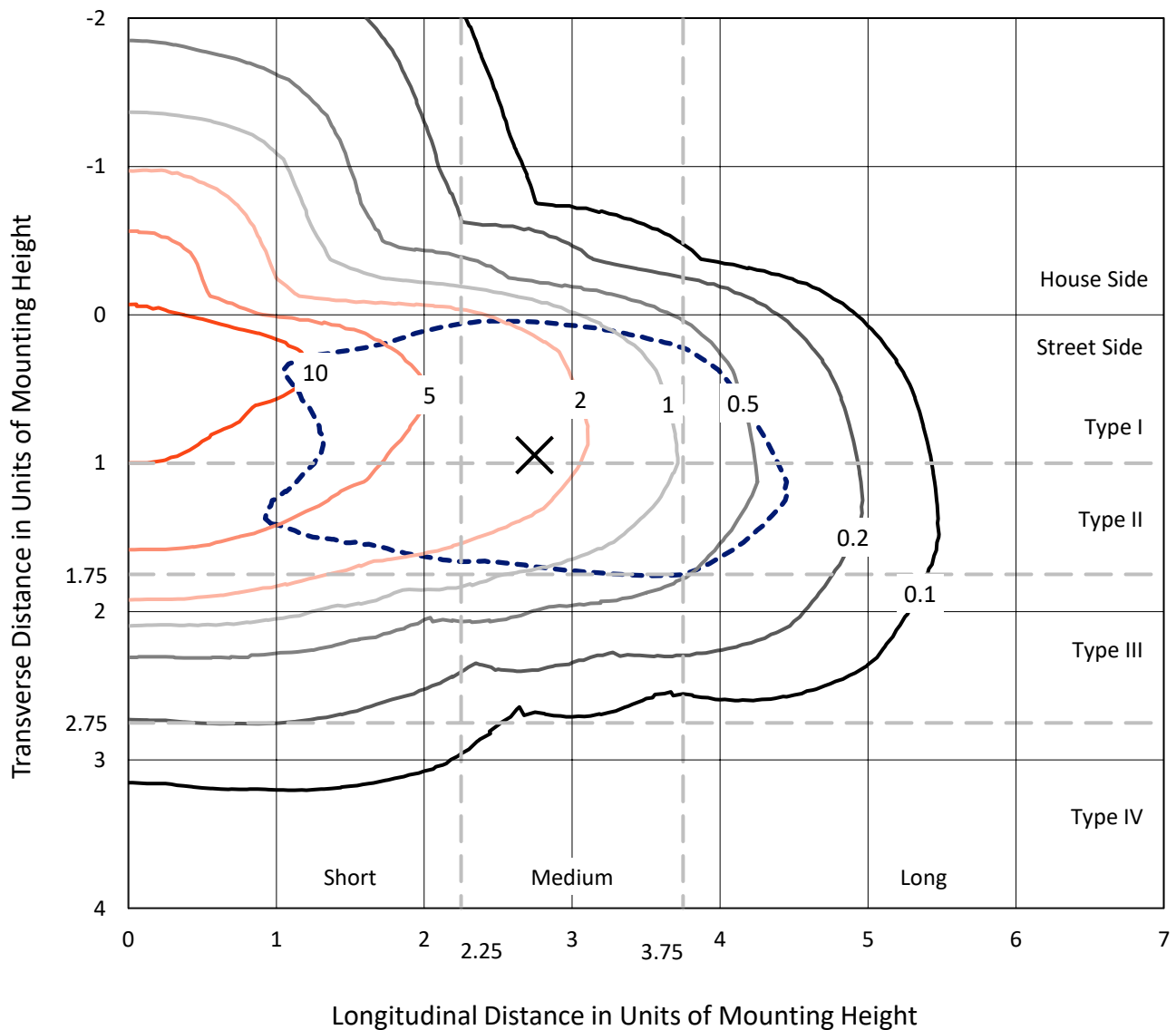


REPORT NUMBER: P458502

CATALOG NUMBER: GALN-SA9D-830-U-T2

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

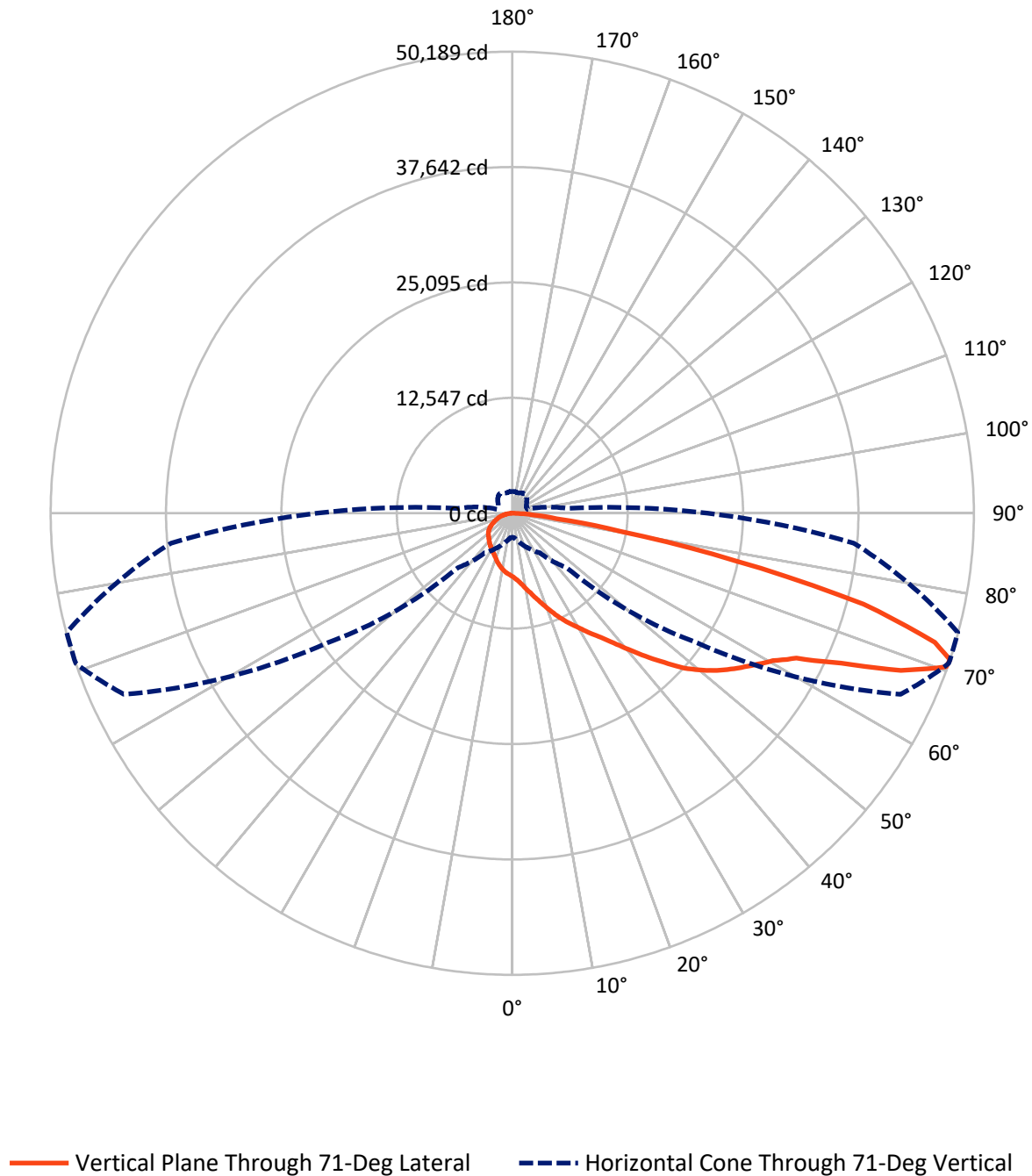


Based on 25 foot mounting height. Maximum calculated value = 15.6 fc
 Type II - Medium - N/A

REPORT NUMBER: P458502

CATALOG NUMBER: GALN-SA9D-830-U-T2

Luminous Intensity Polar Plot



REPORT NUMBER: P458502

CATALOG NUMBER: GALN-SA9D-830-U-T2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10079.7	0.0	10079.7
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	45966.3	0.0	45966.3
	% Fixture	82.0	0.0	82.0
Total	Lumens	56046.0	0.0	56046.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	690.7	1.2
10°-20°	2243.9	4.0
20°-30°	3921.4	7.0
30°-40°	5832.5	10.4
40°-50°	8593.5	15.3
50°-60°	12031.0	21.5
60°-70°	13456.2	24.0
70°-80°	8219.6	14.7
80°-90°	1057.4	1.9
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°	56046.0	100.0
0°-180°	56046.0	100.0

Coefficient of Utilization



REPORT NUMBER: P458502

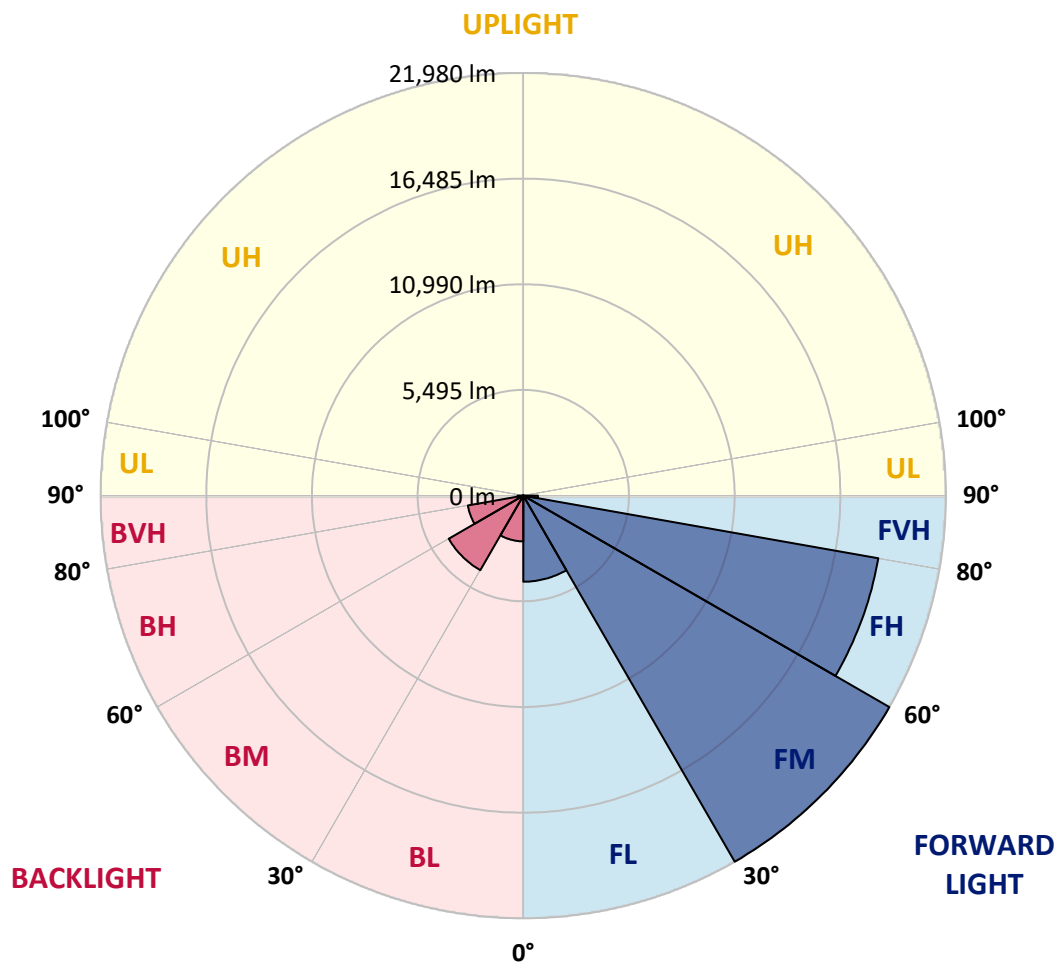
CATALOG NUMBER: GALN-SA9D-830-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4478.1	8.0			
FM	(30°-60°)	21980.1	39.2			
FH	(60°-80°)	18747.2	33.4			G5
FVH	(80°-90°)	760.8	1.4			G5
BL	(0°-30°)	2377.8	4.2	B3/2500		
BM	(30°-60°)	4476.8	8.0	B3/5000		
BH	(60°-80°)	2928.6	5.2	B4/5000		G4/5000
BVH	(80°-90°)	296.5	0.5			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type II Medium



REPORT NUMBER: P458502

CATALOG NUMBER: GALN-SA9D-830-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	6878.5	6878.5	6878.5	6878.5	6878.5	6878.5	6878.5	6878.5	6878.5	6878.5	6878.5
2.5°	7636.3	7599.4	7602.4	7550.1	7482.3	7408.4	7303.6	7211.2	7137.3	7094.2	6967.9
5°	8461.9	8424.9	8378.7	8264.7	8215.4	8033.7	7802.7	7593.2	7433.0	7343.7	7091.1
7.5°	9130.3	9121.1	9108.8	9044.1	8917.8	8665.2	8468.0	8104.5	7867.4	7697.9	7266.7
10°	9543.1	9558.5	9567.7	9580.1	9527.7	9395.2	9124.2	8665.2	8363.3	8147.7	7494.6
12.5°	9752.6	9768.0	9820.3	9934.3	10005.2	9989.7	9768.0	9318.2	8902.4	8619.0	7738.0
15°	9881.9	9906.6	9999.0	10149.9	10387.1	10538.1	10430.2	10014.4	9558.5	9222.7	8027.5
17.5°	10023.6	10051.4	10153.0	10368.6	10679.8	11006.3	11123.3	10766.0	10270.1	9869.6	8351.0
20°	10103.7	10140.7	10285.5	10568.9	10932.4	11406.7	11794.9	11607.0	11064.8	10621.2	8723.7
22.5°	10233.1	10263.9	10387.1	10689.0	11123.3	11717.9	12466.4	12426.3	11948.9	11375.9	9133.4
25°	10584.3	10633.6	10695.2	10876.9	11295.8	12035.1	13023.9	13301.2	12805.2	12164.5	9509.2
27.5°	11246.6	11286.6	11283.5	11308.2	11545.4	12309.3	13507.6	14166.8	13655.4	12962.3	9872.7
30°	12001.3	12016.7	12029.0	11973.5	12025.9	12589.6	13951.1	15023.1	14511.8	13781.7	10190.0
32.5°	12919.2	12950.0	12845.3	12703.6	12660.5	13005.5	14317.7	15879.5	15525.2	14613.4	10504.2
35°	14003.5	14083.6	13871.1	13621.5	13446.0	13603.1	14810.6	16754.3	16563.3	15676.2	10920.0
37.5°	15241.8	15340.4	15143.3	14653.5	14404.0	14447.1	15454.4	17835.5	17875.6	16886.8	11539.2
40°	16255.3	16384.7	16390.8	15697.7	15318.8	15368.1	16270.7	18999.9	19458.9	18383.8	12269.2
42.5°	16923.7	17050.0	17182.5	16775.9	16378.5	16658.8	17222.5	20262.9	21239.4	20201.3	13288.9
45°	17656.9	17770.8	17844.8	17660.0	17438.2	18165.1	18371.5	21606.0	23136.9	22231.3	14404.0
47.5°	18507.1	18633.4	18704.2	18528.6	18445.5	19486.6	19609.8	22859.7	25163.8	24202.7	15636.1
50°	19640.7	19736.1	19699.2	19588.3	19569.8	20500.1	20798.9	24033.3	26836.5	26325.1	16914.5
52.5°	21051.5	21165.5	21205.5	21048.4	20977.5	21224.0	21756.9	25102.2	28358.2	28148.7	18279.1
55°	21904.7	22086.5	22696.4	22942.8	23112.3	22160.4	22788.8	26282.0	29722.8	30070.9	19745.4
57.5°	20811.2	21045.3	22409.9	23642.1	25234.7	24501.5	24252.0	27514.2	31087.4	31934.5	21501.2
60°	18143.6	18195.9	19954.9	22225.1	25428.7	27511.1	27304.7	29473.3	32566.0	33813.6	23814.6
62.5°	12586.5	12697.4	14776.7	18399.3	23032.2	28595.4	32498.3	32855.6	34685.3	36626.0	27206.1
65°	6490.4	6345.6	8240.1	11563.8	17364.2	26020.2	36706.1	39074.9	39281.3	41024.8	31980.7
67.5°	3995.3	4060.0	4947.1	6752.2	10267.0	18910.6	36265.6	46674.3	45586.9	46424.8	36413.4
70°	3000.3	3080.4	3690.3	4620.6	6259.4	10812.2	29165.3	48516.4	50035.0	49819.4	37762.7
71°	2609.1	2692.3	3326.8	4204.8	5258.2	8344.8	24572.4	46588.0	50189.0	50152.0	37254.4
72.5°	2224.1	2276.4	2772.4	3560.9	4432.7	5849.7	18460.9	41782.6	48048.1	49277.2	35440.0
75°	1746.6	1786.6	2008.4	2716.9	3490.1	3591.8	9906.6	31324.6	39463.0	41804.2	29504.1
77.5°	1423.1	1450.9	1564.8	2017.7	2692.3	2544.4	5196.6	20389.2	24723.3	27079.8	17379.6
80°	1130.5	1161.3	1229.1	1367.7	2017.7	1814.4	2479.7	10331.7	11942.7	11918.1	6937.1
82.5°	877.9	887.2	967.2	1004.2	1380.0	1287.6	1343.1	4374.2	4845.5	5005.7	2504.4
85°	554.5	582.2	856.4	770.1	825.5	754.7	662.3	1737.3	2140.9	2110.1	1001.1
87.5°	169.4	178.7	289.6	326.5	366.6	329.6	243.4	511.3	625.3	677.7	249.5
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: P458502

CATALOG NUMBER: GALN-SA9D-830-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6878.5	6878.5	6878.5	6878.5	6878.5	6878.5	6878.5	6878.5	6878.5	6878.5	6878.5
2.5°	6918.6	6884.7	6764.6	6666.0	6573.6	6471.9	6385.7	6361.0	6339.5	6330.2	6327.1
5°	6983.3	6881.6	6644.4	6450.4	6296.3	6154.6	6065.3	6025.3	5985.2	5985.2	5997.5
7.5°	7075.7	6890.9	6524.3	6234.7	6040.7	5908.2	5843.5	5837.4	5846.6	5855.8	5858.9
10°	7177.3	6884.7	6348.7	5988.3	5815.8	5754.2	5757.3	5809.6	5858.9	5895.9	5902.1
12.5°	7275.9	6847.7	6142.3	5757.3	5646.4	5658.7	5745.0	5862.0	5957.5	6009.9	6012.9
15°	7386.8	6789.2	5892.8	5538.6	5501.6	5597.1	5757.3	5935.9	6080.7	6167.0	6176.2
17.5°	7479.2	6690.6	5631.0	5326.0	5372.2	5547.8	5769.6	6000.6	6176.2	6284.0	6302.5
20°	7584.0	6564.3	5359.9	5122.7	5255.2	5492.4	5745.0	5994.5	6176.2	6280.9	6305.6
22.5°	7667.1	6385.7	5101.1	4956.4	5150.4	5424.6	5661.8	5862.0	6009.9	6065.3	6102.3
25°	7701.0	6160.8	4857.8	4820.8	5067.3	5313.7	5473.9	5587.9	5634.1	5627.9	5643.3
27.5°	7682.5	5902.1	4648.3	4713.0	4962.5	5141.2	5221.3	5212.0	5128.9	5051.9	5088.8
30°	7605.5	5594.0	4472.7	4602.1	4827.0	4925.6	4913.2	4793.1	4636.0	4491.2	4500.5
32.5°	7466.9	5261.3	4309.5	4475.8	4636.0	4679.1	4596.0	4438.9	4214.0	4026.1	3998.4
35°	7349.8	4944.0	4164.7	4331.0	4445.0	4423.5	4343.4	4140.1	3936.8	3770.4	3742.7
37.5°	7331.4	4673.0	4026.1	4167.8	4232.5	4201.7	4103.1	3930.6	3856.7	3730.4	3715.0
40°	7429.9	4482.0	3884.4	3995.3	4026.1	4001.4	3893.6	3795.1	3862.8	3832.0	3832.0
42.5°	7697.9	4380.3	3758.1	3822.8	3847.4	3865.9	3788.9	3705.7	3788.9	3647.2	3601.0
45°	8123.0	4383.4	3644.1	3653.4	3727.3	3792.0	3739.6	3616.4	3573.3	3289.9	3234.4
47.5°	8748.3	4488.1	3551.7	3493.2	3625.6	3733.4	3659.5	3480.9	3289.9	3102.0	3068.1
50°	9478.4	4676.1	3468.5	3326.8	3490.1	3659.5	3604.1	3394.6	3197.5	3083.5	3061.9
52.5°	10288.5	4913.2	3366.9	3142.0	3323.8	3625.6	3616.4	3382.3	3111.2	3034.2	3015.7
55°	11289.7	5147.4	3240.6	2926.4	3175.9	3597.9	3582.5	3280.6	3092.7	3037.3	3031.1
57.5°	12454.1	5486.2	3058.8	2707.7	3006.5	3483.9	3450.1	3219.0	3031.1	2991.1	2988.0
60°	14330.0	6012.9	2800.1	2507.4	2834.0	3283.7	3326.8	3114.3	2932.5	2923.3	2920.2
62.5°	16797.4	6752.2	2532.1	2301.1	2633.7	3025.0	3148.2	2972.6	2827.8	2874.0	2880.2
65°	20204.4	7374.5	2254.9	2125.5	2412.0	2775.4	2978.8	2840.1	2710.8	2800.1	2800.1
67.5°	22425.3	7386.8	2002.3	1943.7	2187.1	2566.0	2800.1	2683.0	2559.8	2710.8	2716.9
70°	21963.3	6471.9	1792.8	1752.7	1968.4	2341.1	2602.9	2510.5	2368.8	2504.4	2455.1
71°	21217.8	5963.7	1709.6	1678.8	1882.1	2233.3	2510.5	2433.5	2291.8	2381.2	2353.4
72.5°	20028.8	5178.2	1574.1	1580.2	1752.7	2097.8	2381.2	2301.1	2159.4	2208.6	2199.4
75°	16929.9	4522.0	1346.1	1373.9	1506.3	1866.7	2122.4	2060.8	1916.0	1916.0	1906.8
77.5°	10584.3	3160.5	1118.2	1133.6	1278.4	1598.7	1823.6	1771.2	1632.6	1586.4	1574.1
80°	3949.1	1632.6	874.8	893.3	982.6	1259.9	1509.4	1460.1	1318.4	1266.0	1216.8
82.5°	1494.0	819.4	643.8	628.4	723.9	961.1	1182.9	1124.3	1013.5	887.2	850.2
85°	563.7	406.6	394.3	382.0	425.1	569.9	733.1	720.8	603.8	514.4	505.2
87.5°	147.9	132.5	154.0	114.0	120.1	107.8	110.9	46.2	21.6	9.2	6.2
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)