

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: P190988

Luminaire Tested: **GLEON-AF-10-LED-E1-AFL-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190988
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-10-LED-E1-AFL-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 67827.8 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B4 - U0 - G4

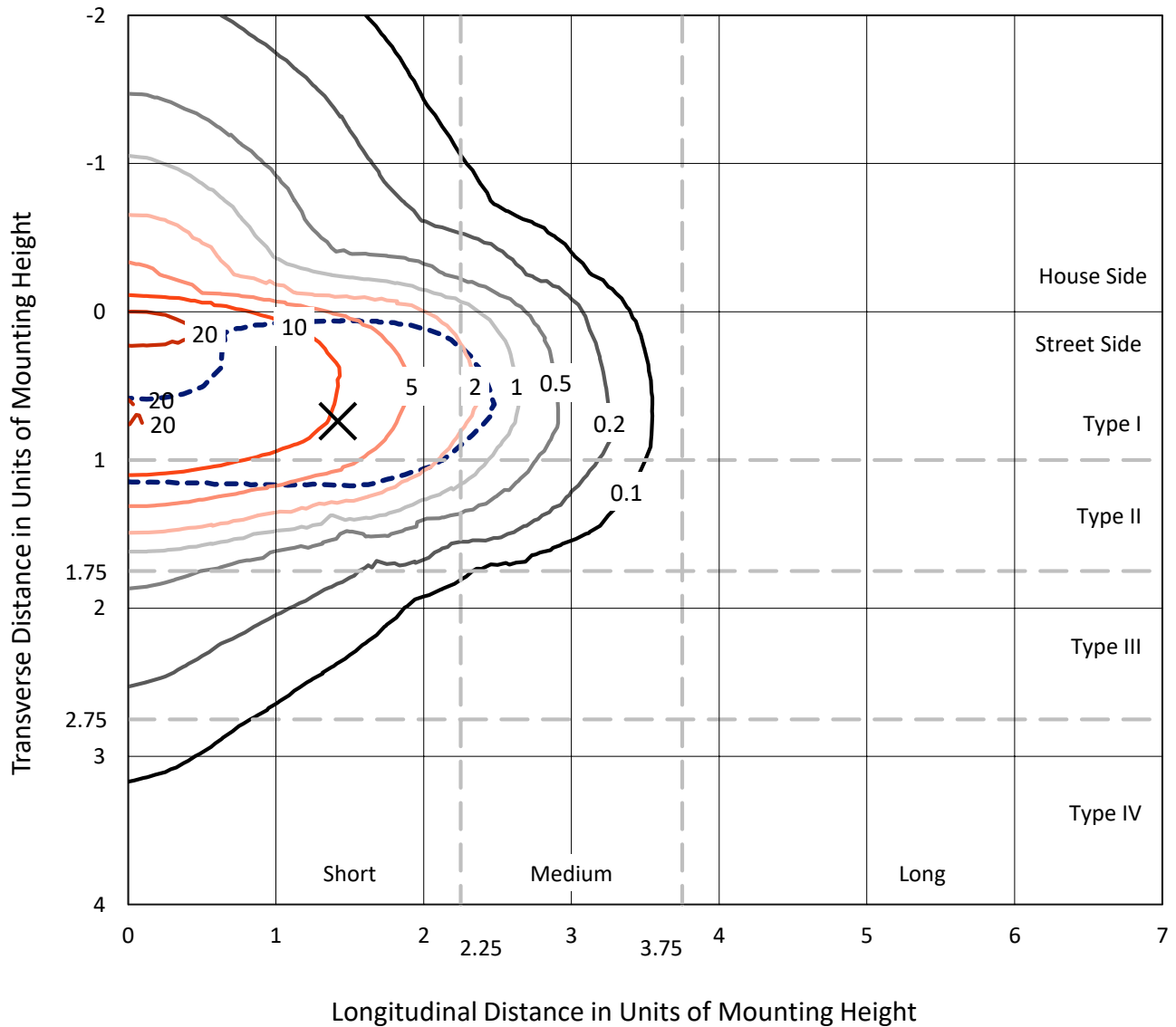
Input Watts (W): 640
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

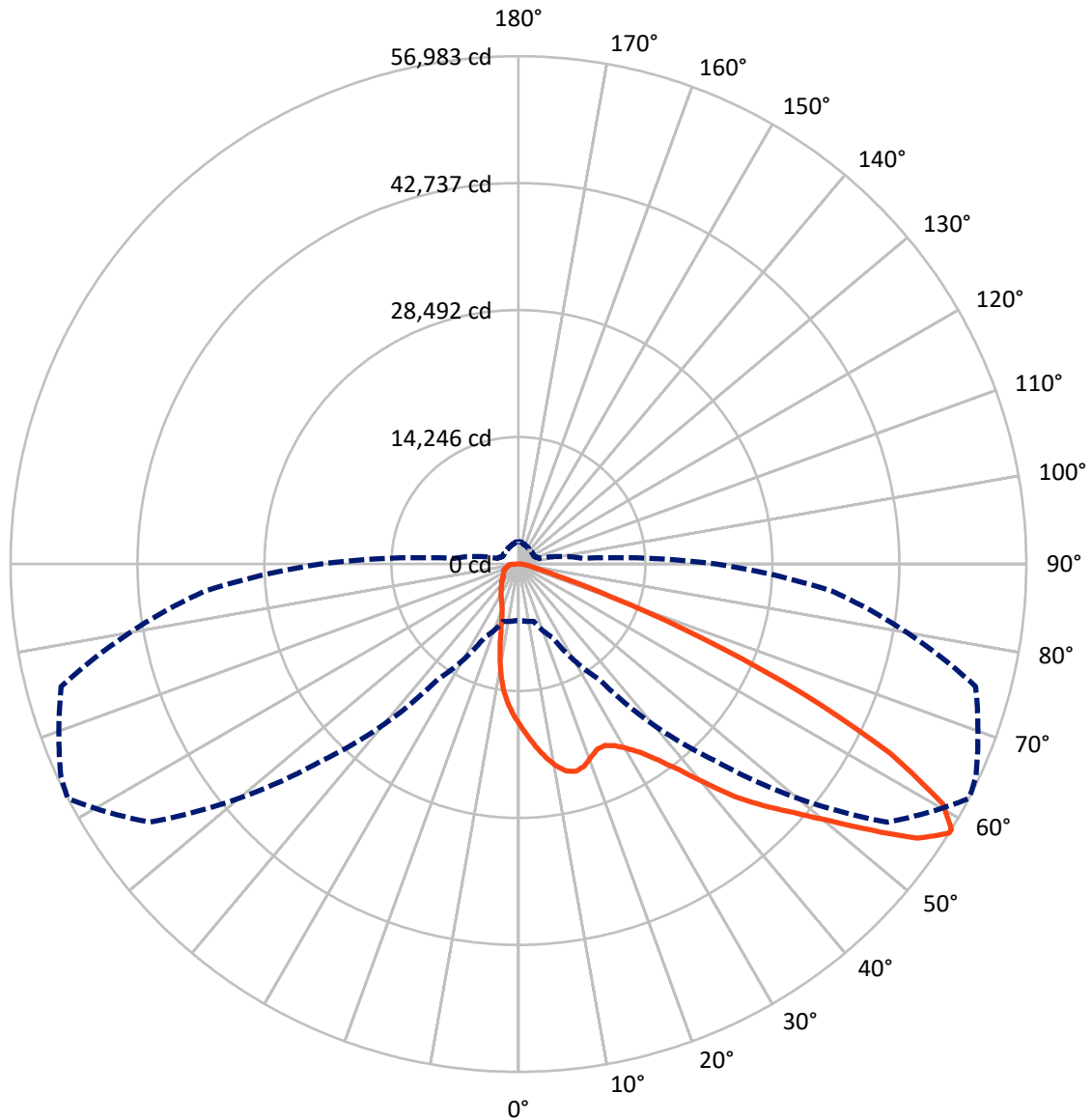
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 24.4 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10344.0	0.0	10344.0
	% Fixture	15.3	0.0	15.3
Street Side	Lumens	57483.8	0.0	57483.8
	% Fixture	84.7	0.0	84.7
Total	Lumens	67827.8	0.0	67827.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1611.4	2.4
10°-20°	4118.9	6.1
20°-30°	6658.3	9.8
30°-40°	10570.0	15.6
40°-50°	15466.2	22.8
50°-60°	16176.3	23.8
60°-70°	9557.0	14.1
70°-80°	2692.3	4.0
80°-90°	977.4	1.4
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°	67827.8	100.0
0°-180°	67827.8	100.0

Coefficient of Utilization



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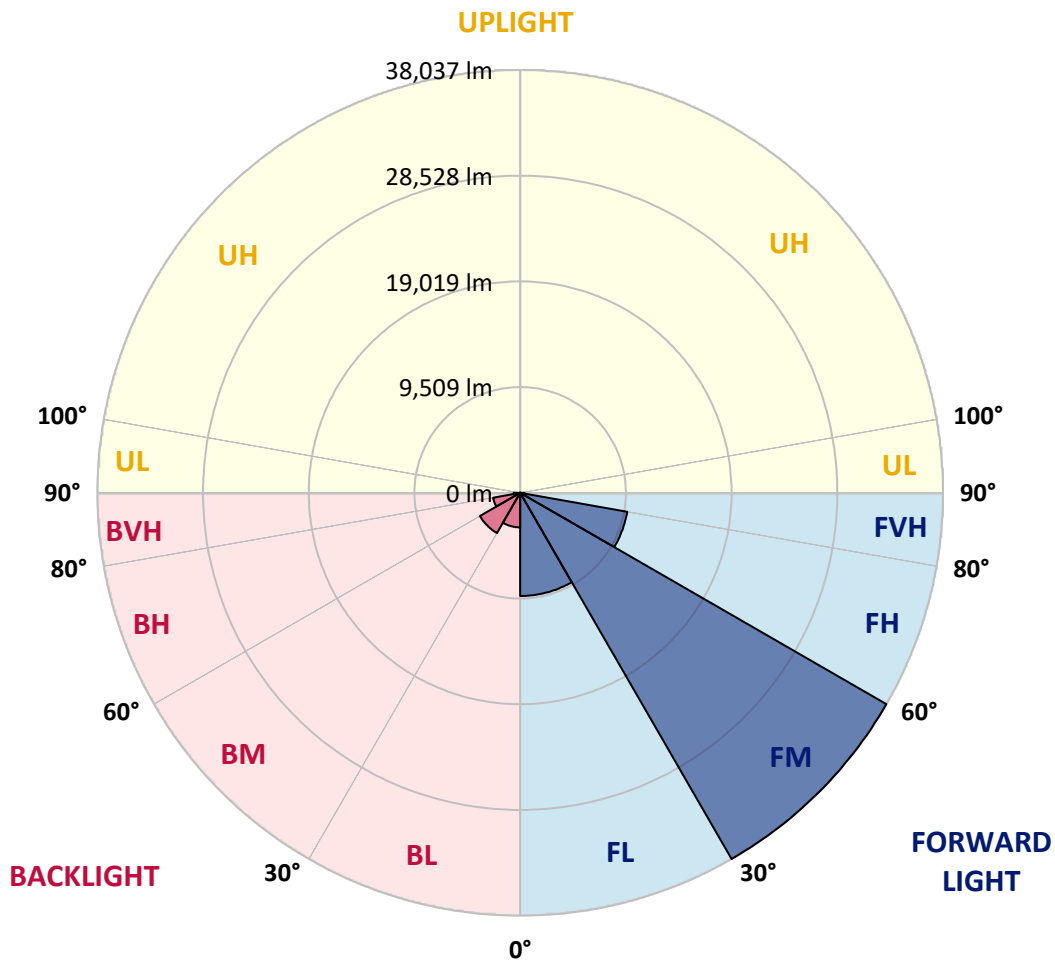
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	9279.7	13.7			
FM	(30°-60°)	38037.4	56.1			
FH	(60°-80°)	9781.0	14.4			G4/12000
FVH	(80°-90°)	385.6	0.6			G3/500
BL	(0°-30°)	3108.9	4.6	B4/5000		
BM	(30°-60°)	4175.1	6.2	B3/5000		
BH	(60°-80°)	2468.2	3.6	B3/2500		G3/2500
BVH	(80°-90°)	591.8	0.9			G4/750
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	18017.0	18017.0	18017.0	18017.0	18017.0	18017.0	18017.0	18017.0	18017.0	18017.0	18017.0
2.5°	20588.2	20422.1	20316.7	20224.0	20102.7	19844.0	19495.9	19275.5	19163.7	18783.6	18333.2
5°	22606.8	22459.8	22351.3	22226.7	22009.5	21603.9	21041.7	20594.6	20374.2	19614.1	18713.4
7.5°	22134.1	22194.8	22383.2	22712.2	22993.3	22939.0	22437.5	21868.9	21578.3	20521.1	19154.1
10°	19285.1	19390.4	19716.3	20486.0	21731.7	23009.2	23398.9	23006.1	22712.2	21418.6	19607.6
12.5°	18713.4	18710.2	18735.8	18940.1	19681.2	21479.3	23430.8	23826.9	23651.2	22274.7	20070.8
15°	18946.5	18952.9	18933.7	19019.9	19249.9	19962.2	22453.5	24143.1	24267.7	23137.0	20549.9
17.5°	19559.7	19543.8	19470.3	19470.3	19553.4	19831.2	21303.7	23849.2	24424.2	23900.3	20971.5
20°	20588.2	20514.8	20319.9	20141.1	20051.6	20201.7	20831.0	23172.1	24152.7	24567.9	21319.6
22.5°	21833.9	21776.4	21460.2	21076.9	20767.0	20763.9	21073.7	22581.2	23683.2	25197.0	21613.4
25°	23443.6	23351.0	22881.5	22268.2	21725.2	21517.7	21603.9	22552.5	23427.6	25880.6	21875.4
27.5°	25334.4	25165.1	24609.3	23724.7	22926.2	22507.8	22383.2	23073.1	23660.8	26726.9	22239.5
30°	27627.7	27432.8	26720.6	25567.5	24440.1	23753.4	23488.3	23996.2	24433.7	27758.6	22824.0
32.5°	30237.1	29956.1	29132.0	27860.8	26378.8	25331.2	24900.1	25216.2	25564.4	29001.1	23555.4
35°	33843.1	33507.7	32316.3	30562.9	28889.3	27448.8	26758.9	26988.9	27327.4	30853.5	24612.6
37.5°	36302.4	36152.3	35360.2	33712.2	31891.6	30233.9	29167.2	29301.3	29492.9	33169.2	25966.8
40°	36280.1	36340.7	36356.7	36372.7	35133.5	33546.0	32399.4	32258.9	32220.6	35711.5	27506.3
42.5°	34462.7	34711.8	35516.8	37148.9	37902.6	37174.3	36123.6	35718.0	35516.8	38707.4	29138.4
45°	31680.8	31814.9	33322.5	36510.0	39320.7	40767.6	39972.3	38694.6	38330.6	41460.6	30492.6
47.5°	30246.7	30393.6	31342.2	34817.3	39304.7	43670.9	44130.8	41697.0	41045.5	43856.2	31661.7
50°	26832.4	27139.0	28333.5	31872.4	37870.7	45005.9	48477.7	45274.3	43926.4	46187.7	32833.8
52.5°	20562.6	21035.3	22373.6	27030.4	34232.7	44344.8	51956.0	49611.6	47708.0	48602.3	33839.9
55°	12970.6	13322.0	14446.2	19090.2	27384.9	40904.9	53275.1	54303.5	52610.8	50889.1	34711.8
57.5°	7052.2	7208.7	7630.4	10540.1	17812.6	33300.1	51352.3	56973.7	56271.0	52831.1	35369.8
58°	6311.2	6416.7	6678.5	9134.6	15797.2	31220.9	50499.5	56983.3	56631.9	53115.4	35420.9
60°	4682.4	4628.0	4394.9	5212.5	8793.0	21568.7	45344.5	54702.8	55734.5	53463.5	35171.8
62.5°	4113.8	3982.9	3507.0	3452.7	4276.7	9936.3	34695.8	46858.4	49295.4	51476.8	33657.8
65°	3864.7	3724.2	3110.9	2912.9	3085.3	4203.2	20438.0	35143.1	38199.6	45453.1	29786.8
67.5°	3679.5	3497.4	2858.5	2587.1	2599.8	2778.7	8192.5	22134.1	25574.0	34510.6	23168.9
70°	3500.5	3302.5	2644.6	2331.6	2258.2	2197.4	3257.8	11079.8	14200.3	21798.7	14772.0
72.5°	3308.9	3114.1	2456.1	2130.4	1986.7	1785.5	2127.1	4532.2	6330.4	10313.3	6700.9
75°	3031.1	2855.4	2267.7	1951.5	1747.1	1478.8	1606.5	2366.7	2839.4	4107.5	3229.0
77.5°	2689.3	2545.6	2056.9	1804.6	1549.1	1200.9	1236.0	1641.7	1820.5	2350.7	1919.6
80°	1932.4	1983.4	1830.2	1622.5	1379.8	974.2	948.6	1197.8	1293.5	1510.7	1248.8
82.5°	1357.5	1386.2	1514.0	1325.5	1140.3	766.5	699.5	843.2	900.7	993.3	673.9
85°	935.8	903.9	1038.0	923.0	824.1	511.1	479.0	571.7	606.8	616.4	348.1
87.5°	562.1	562.1	600.5	495.1	444.0	265.1	258.7	325.8	348.1	332.2	191.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	18017.0	18017.0	18017.0	18017.0	18017.0	18017.0	18017.0	18017.0	18017.0	18017.0	18017.0
2.5°	18065.0	17838.2	17355.9	16969.4	16480.8	15973.0	15688.7	15385.3	15177.6	15027.6	15267.0
5°	18202.3	17739.2	16742.6	15797.2	14752.9	13666.9	12842.8	12076.3	11543.0	11210.7	11523.7
7.5°	18419.5	17707.3	16119.9	14503.7	12628.8	10821.1	9204.9	8192.5	7601.6	7310.9	7493.0
10°	18668.6	17656.1	15388.5	12750.3	10067.4	7790.1	6582.7	6173.9	6039.8	5985.5	6011.1
12.5°	18876.2	17547.6	14490.9	10629.5	7560.1	6151.5	5803.4	5793.8	5822.5	5829.0	5838.5
15°	19023.2	17387.8	13159.0	8419.3	6046.2	5605.4	5586.2	5643.7	5698.0	5720.3	5733.1
17.5°	19122.2	17058.9	11654.7	6656.2	5416.9	5340.3	5385.0	5458.5	5516.0	5531.9	5544.7
20°	19112.6	16576.6	9862.9	5551.0	5075.2	5075.2	5151.9	5209.4	5212.5	5193.3	5202.9
22.5°	19013.6	15915.5	8125.4	4963.4	4771.8	4826.1	4902.7	4848.4	4624.9	4478.0	4487.5
25°	18847.5	15126.6	6637.0	4589.7	4490.7	4586.5	4564.2	4155.3	3836.0	3692.2	3692.2
27.5°	18700.6	14194.0	5493.6	4264.0	4209.6	4327.8	3931.7	3561.3	3427.1	3360.0	3337.7
30°	18595.2	13187.8	4730.2	3950.9	3944.5	3858.3	3411.1	3308.9	3286.5	3232.3	3213.1
32.5°	18620.8	12168.9	4241.6	3676.3	3698.6	3302.5	3162.0	3184.3	3165.2	3107.7	3082.2
35°	18831.5	11201.2	3922.2	3427.1	3360.0	2983.1	3015.0	3056.6	3050.2	2970.3	2944.9
37.5°	19208.5	10284.5	3711.4	3219.5	2932.1	2823.4	2874.6	2938.4	2922.5	2868.1	2849.0
40°	19604.4	9422.2	3538.9	3056.6	2679.7	2714.8	2759.6	2794.7	2810.7	2826.6	2813.8
42.5°	19990.9	8521.5	3328.1	2890.6	2574.4	2612.6	2631.8	2666.9	2753.2	2813.8	2810.7
45°	20220.9	7675.1	3110.9	2654.1	2491.3	2513.6	2500.9	2571.1	2676.6	2775.6	2778.7
47.5°	20476.4	7017.1	2938.4	2437.0	2411.4	2427.4	2389.1	2459.4	2555.1	2676.6	2689.3
50°	20786.3	6624.2	2801.0	2264.5	2302.9	2302.9	2293.3	2357.2	2491.3	2631.8	2657.3
52.5°	21137.5	6547.6	2686.1	2139.9	2194.2	2191.1	2200.7	2296.4	2443.4	2580.7	2603.1
55°	21565.5	6755.2	2561.6	2047.3	2088.9	2101.7	2133.6	2242.1	2366.7	2523.2	2532.8
57.5°	22063.8	7176.8	2462.5	1973.9	1993.0	2034.5	2085.7	2184.6	2318.8	2491.3	2500.9
58°	22146.9	7266.2	2446.6	1967.4	1973.9	2021.8	2079.2	2175.1	2309.2	2497.6	2507.3
60°	22150.1	7563.3	2411.4	1938.7	1900.4	1980.2	2044.2	2139.9	2293.3	2520.0	2542.3
62.5°	21364.3	7560.1	2385.9	1897.2	1823.7	1922.7	1996.2	2108.0	2277.3	2574.4	2619.1
65°	18812.4	6870.1	2264.5	1833.3	1763.1	1871.7	1954.7	2085.7	2322.0	2810.7	2839.4
67.5°	14714.5	5630.9	2037.7	1743.9	1683.2	1820.5	1929.2	2082.4	2369.9	2865.0	2884.1
70°	9728.8	4212.8	1788.6	1641.7	1600.2	1759.9	1942.0	2191.1	2315.7	2750.0	2698.9
72.5°	5049.6	2957.6	1587.4	1514.0	1504.4	1705.6	2127.1	2178.3	2261.3	2587.1	2523.2
75°	2651.0	2053.7	1411.8	1373.4	1389.4	1692.8	2510.4	2120.8	2191.1	2475.3	2596.7
77.5°	1622.5	1657.7	1261.6	1245.6	1277.6	1654.4	2507.3	2047.3	2088.9	2277.3	2411.4
80°	1086.0	1344.7	1146.6	1149.8	1172.2	1514.0	2251.7	1932.4	1964.3	2152.7	2290.1
82.5°	686.7	795.3	1041.3	1095.5	1066.7	1248.8	1913.2	1759.9	1804.6	2462.5	2603.1
85°	348.1	498.3	903.9	1054.0	961.4	875.1	1552.2	1542.7	1565.0	1775.8	1855.7
87.5°	159.7	274.7	705.8	919.8	725.1	546.2	1127.5	1143.5	1232.9	1261.6	1261.6
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)