

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: P651420

Luminaire Tested: **GALN-SA5D-840-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651420
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-SA5D-840-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32767.1 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

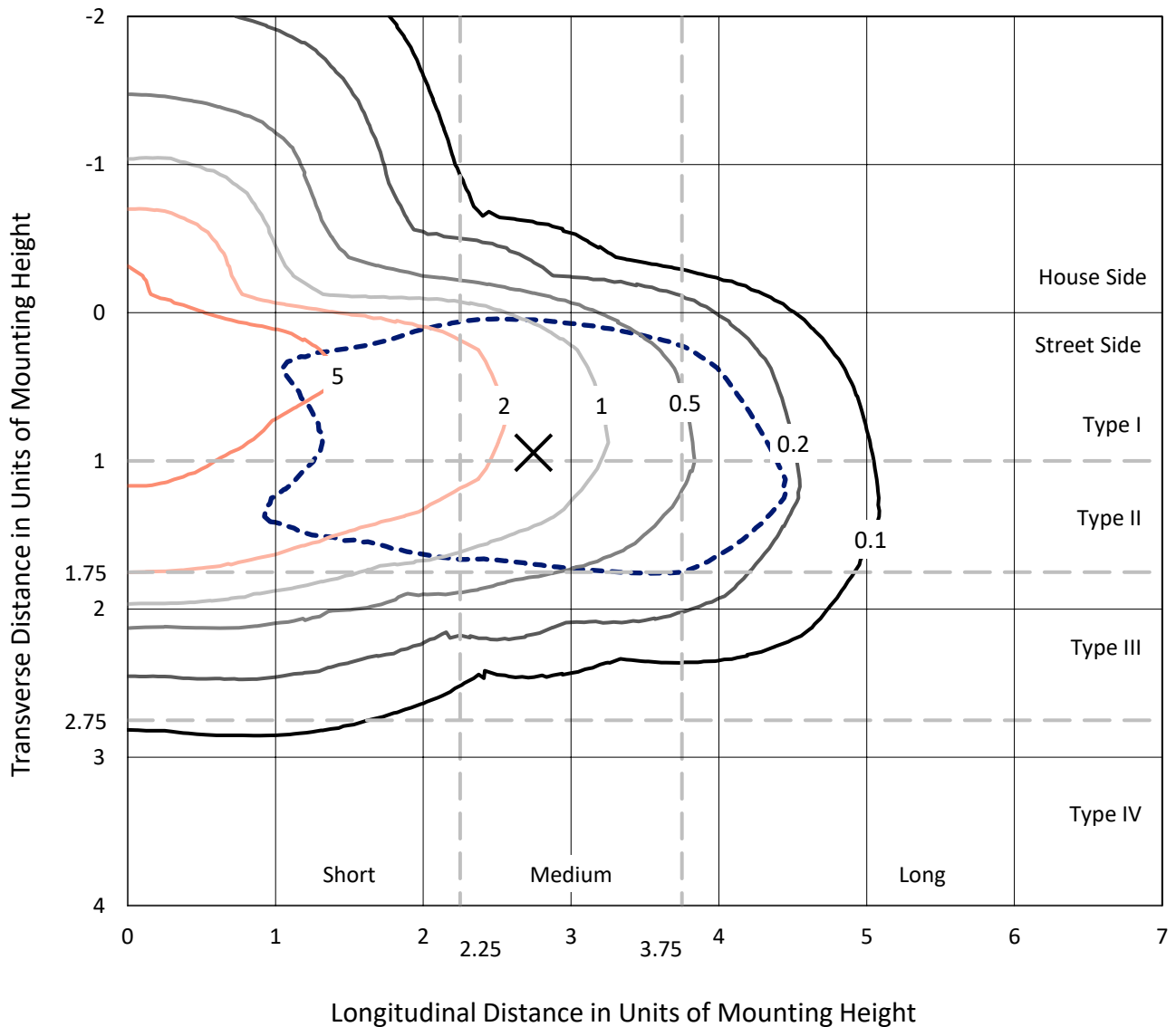
Input Watts (W): 309
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

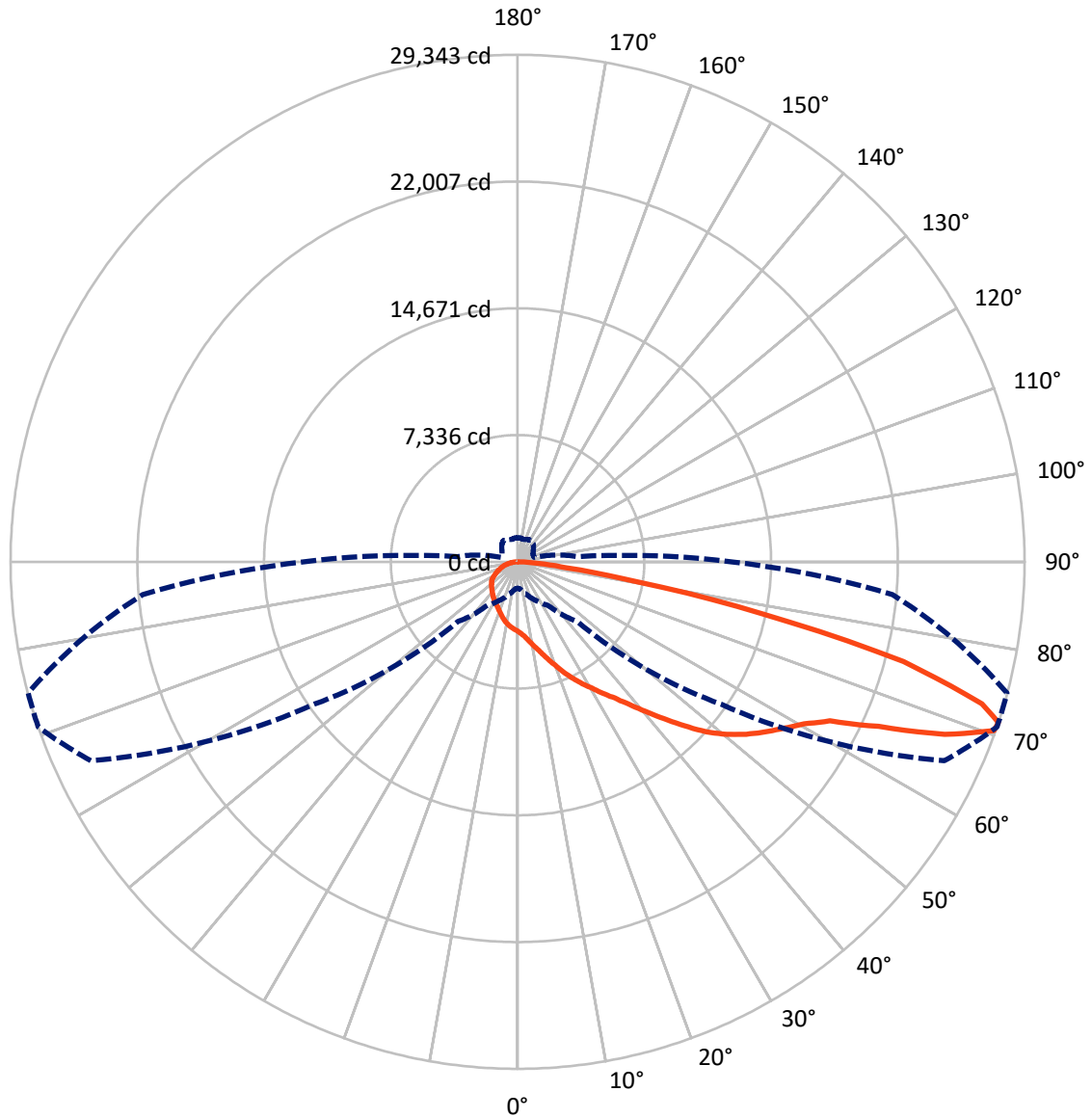
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.1 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5893.1	0.0	5893.1
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	26874.0	0.0	26874.0
	% Fixture	82.0	0.0	82.0
Total	Lumens	32767.1	0.0	32767.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	403.8	1.2
10°-20°	1311.9	4.0
20°-30°	2292.6	7.0
30°-40°	3410.0	10.4
40°-50°	5024.1	15.3
50°-60°	7033.9	21.5
60°-70°	7867.1	24.0
70°-80°	4805.5	14.7
80°-90°	618.2	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°	32767.1	100.0
0°-180°	32767.1	100.0

Coefficient of Utilization



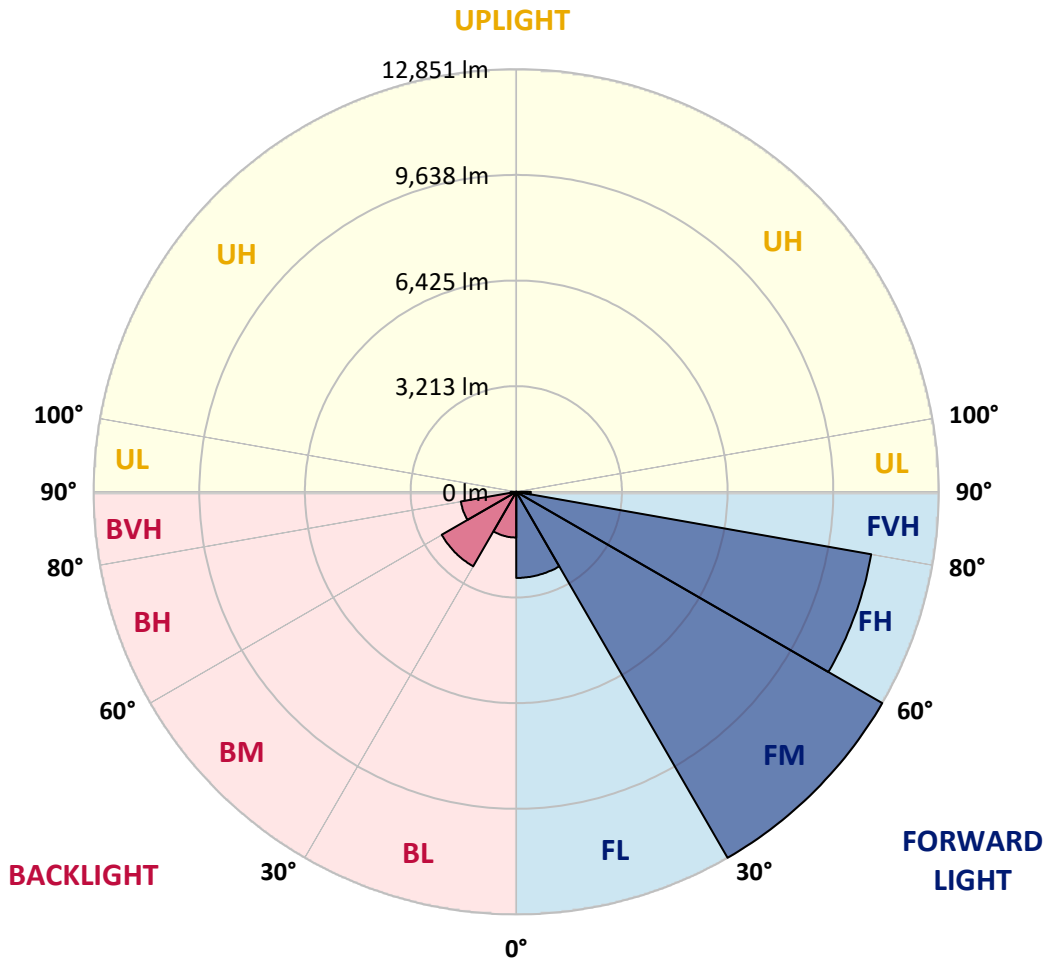
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2618.1	8.0			
FM (30°-60°)	12850.6	39.2			
FH (60°-80°)	10960.5	33.4			G4/12000
FVH (80°-90°)	444.8	1.4			G3/500
BL (0°-30°)	1390.2	4.2	B3/2500		
BM (30°-60°)	2617.3	8.0	B3/5000		
BH (60°-80°)	1712.2	5.2	B3/2500		G3/2500
BVH (80°-90°)	173.4	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	4021.5	4021.5	4021.5	4021.5	4021.5	4021.5	4021.5	4021.5	4021.5	4021.5	4021.5
2.5°	4464.5	4442.9	4444.8	4414.1	4374.5	4331.2	4270.0	4216.0	4172.8	4147.6	4073.7
5°	4947.2	4925.6	4898.6	4832.0	4803.1	4696.9	4561.8	4439.3	4345.7	4293.5	4145.8
7.5°	5338.0	5332.6	5325.4	5287.5	5213.7	5066.0	4950.8	4738.3	4599.6	4500.5	4248.4
10°	5579.4	5588.4	5593.7	5601.0	5570.3	5492.9	5334.4	5066.0	4889.6	4763.5	4381.7
12.5°	5701.8	5710.8	5741.4	5808.0	5849.5	5840.5	5710.8	5447.8	5204.7	5039.0	4524.0
15°	5777.4	5791.8	5845.9	5934.1	6072.8	6161.0	6098.0	5854.9	5588.4	5392.0	4693.3
17.5°	5860.3	5876.5	5935.9	6062.0	6243.8	6434.7	6503.2	6294.3	6004.3	5770.2	4882.3
20°	5907.1	5928.7	6013.3	6179.1	6391.5	6668.9	6895.8	6785.9	6469.0	6209.7	5100.2
22.5°	5982.7	6000.8	6072.8	6249.3	6503.2	6850.8	7288.4	7265.0	6985.9	6650.9	5339.8
25°	6188.1	6216.8	6252.9	6359.1	6604.0	7036.3	7614.4	7776.5	7486.5	7111.9	5559.5
27.5°	6575.3	6598.7	6596.9	6611.3	6750.0	7196.6	7897.2	8282.5	7983.6	7578.3	5772.0
30°	7016.5	7025.5	7032.7	7000.2	7030.8	7360.4	8156.4	8783.2	8484.3	8057.5	5957.6
32.5°	7553.2	7571.2	7510.0	7427.1	7401.9	7603.6	8370.8	9283.9	9076.7	8543.7	6141.2
35°	8187.1	8233.9	8109.7	7963.8	7861.1	7953.0	8658.9	9795.3	9683.7	9165.0	6384.4
37.5°	8911.1	8968.7	8853.5	8567.1	8421.2	8446.4	9035.4	10427.5	10450.9	9872.8	6746.3
40°	9503.6	9579.2	9582.9	9177.6	8956.1	8984.9	9512.6	11108.3	11376.5	10748.1	7173.1
42.5°	9894.4	9968.2	10045.7	9807.9	9575.6	9739.5	10069.0	11846.6	12417.5	11810.6	7769.2
45°	10323.0	10389.6	10432.9	10324.8	10195.1	10620.1	10740.8	12631.8	13526.9	12997.4	8421.2
47.5°	10820.1	10893.9	10935.4	10832.7	10784.1	11392.8	11464.8	13364.8	14711.9	14150.0	9141.6
50°	11482.8	11538.7	11517.1	11452.2	11441.4	11985.3	12159.9	14051.0	15689.9	15390.9	9889.0
52.5°	12307.6	12374.3	12397.7	12305.8	12264.4	12408.5	12720.0	14675.9	16579.5	16457.0	10686.8
55°	12806.5	12912.8	13269.4	13413.4	13512.5	12956.0	13323.4	15365.7	17377.3	17580.9	11544.1
57.5°	12167.2	12304.1	13101.9	13822.3	14753.3	14324.7	14178.8	16086.1	18175.1	18670.4	12570.6
60°	10607.5	10638.1	11666.5	12993.8	14866.8	16084.2	15963.6	17231.4	19039.6	19769.0	13923.1
62.5°	7358.7	7423.5	8639.1	10757.1	13465.7	16718.2	19000.0	19208.9	20278.6	21413.2	15905.9
65°	3794.6	3709.9	4817.5	6760.7	10152.0	15212.6	21460.0	22845.0	22965.6	23985.0	18697.4
67.5°	2335.8	2373.6	2892.3	3947.7	6002.6	11056.0	21202.5	27287.9	26652.1	27142.0	21289.0
70°	1754.2	1800.9	2157.5	2701.4	3659.5	6321.3	17051.4	28364.8	29252.8	29126.7	22077.8
71°	1525.4	1574.0	1945.0	2458.3	3074.2	4878.7	14366.1	27237.5	29342.7	29321.1	21780.6
72.5°	1300.3	1330.9	1620.9	2081.9	2591.5	3420.0	10793.1	24428.0	28091.2	28809.7	20719.9
75°	1021.1	1044.5	1174.2	1588.4	2040.4	2099.9	5791.8	18313.8	23071.9	24440.6	17249.4
77.5°	832.0	848.2	914.8	1179.6	1574.0	1487.6	3038.2	11920.4	14454.4	15832.1	10161.0
80°	660.9	678.9	718.6	799.6	1179.6	1060.8	1449.8	6040.4	6982.2	6967.9	4055.7
82.5°	513.3	518.6	565.5	587.1	806.9	752.8	785.2	2557.3	2832.9	2926.5	1464.2
85°	324.2	340.4	500.6	450.3	482.6	441.3	387.2	1015.8	1251.7	1233.7	585.3
87.5°	99.1	104.5	169.3	190.9	214.3	192.7	142.3	299.0	365.6	396.2	145.9
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°	4021.5	4021.5	4021.5	4021.5	4021.5	4021.5	4021.5	4021.5	4021.5	4021.5	4021.5
2.5°	4045.0	4025.1	3954.9	3897.3	3843.2	3783.7	3733.4	3719.0	3706.4	3700.9	3699.1
5°	4082.7	4023.3	3884.7	3771.2	3681.1	3598.3	3546.1	3522.6	3499.2	3499.2	3506.5
7.5°	4136.8	4028.7	3814.4	3645.1	3531.6	3454.2	3416.4	3412.8	3418.2	3423.6	3425.4
10°	4196.2	4025.1	3711.8	3501.0	3400.2	3364.2	3365.9	3396.5	3425.4	3447.0	3450.6
12.5°	4253.9	4003.5	3591.1	3365.9	3301.1	3308.3	3358.8	3427.2	3483.0	3513.6	3515.5
15°	4318.7	3969.3	3445.2	3238.1	3216.5	3272.3	3365.9	3470.4	3555.1	3605.5	3610.9
17.5°	4372.7	3911.7	3292.1	3113.8	3140.9	3243.5	3373.2	3508.2	3610.9	3673.9	3684.8
20°	4433.9	3837.8	3133.7	2995.0	3072.4	3211.1	3358.8	3504.6	3610.9	3672.1	3686.5
22.5°	4482.5	3733.4	2982.4	2897.7	3011.2	3171.5	3310.2	3427.2	3513.6	3546.1	3567.7
25°	4502.4	3601.9	2840.1	2818.4	2962.6	3106.7	3200.3	3266.9	3293.9	3290.3	3299.3
27.5°	4491.5	3450.6	2717.6	2755.5	2901.3	3005.7	3052.6	3047.2	2998.6	2953.5	2975.1
30°	4446.5	3270.5	2615.0	2690.6	2822.1	2879.7	2872.5	2802.3	2710.5	2625.8	2631.2
32.5°	4365.5	3076.0	2519.6	2616.8	2710.5	2735.6	2687.0	2595.2	2463.7	2353.9	2337.6
35°	4297.1	2890.5	2434.9	2532.2	2598.8	2586.2	2539.3	2420.5	2301.6	2204.3	2188.1
37.5°	4286.2	2732.1	2353.9	2436.7	2474.5	2456.5	2398.9	2298.0	2254.8	2181.0	2172.0
40°	4343.8	2620.4	2271.0	2335.8	2353.9	2339.4	2276.4	2218.7	2258.4	2240.3	2240.3
42.5°	4500.5	2560.9	2197.1	2235.0	2249.3	2260.2	2215.2	2166.5	2215.2	2132.4	2105.3
45°	4749.1	2562.8	2130.5	2135.9	2179.1	2217.0	2186.3	2114.3	2089.1	1923.4	1891.0
47.5°	5114.7	2624.0	2076.5	2042.3	2119.7	2182.7	2139.5	2035.1	1923.4	1813.5	1793.8
50°	5541.5	2733.8	2027.9	1945.0	2040.4	2139.5	2107.1	1984.7	1869.4	1802.8	1790.2
52.5°	6015.2	2872.5	1968.4	1837.0	1943.2	2119.7	2114.3	1977.4	1818.9	1773.9	1763.2
55°	6600.4	3009.4	1894.6	1710.9	1856.8	2103.5	2094.5	1918.0	1808.2	1775.8	1772.2
57.5°	7281.2	3207.5	1788.3	1583.0	1757.7	2036.9	2017.1	1882.0	1772.2	1748.7	1746.9
60°	8378.0	3515.5	1637.1	1465.9	1656.9	1919.8	1945.0	1820.8	1714.5	1709.1	1707.3
62.5°	9820.5	3947.7	1480.4	1345.3	1539.8	1768.5	1840.5	1737.9	1653.2	1680.3	1683.9
65°	11812.4	4311.5	1318.3	1242.7	1410.1	1622.6	1741.5	1660.5	1584.9	1637.1	1637.1
67.5°	13110.9	4318.7	1170.6	1136.4	1278.7	1500.2	1637.1	1568.6	1496.6	1584.9	1588.4
70°	12840.7	3783.7	1048.1	1024.8	1150.8	1368.7	1521.8	1467.8	1385.0	1464.2	1435.3
71°	12404.9	3486.6	999.5	981.5	1100.4	1305.7	1467.8	1422.7	1339.9	1392.1	1376.0
72.5°	11709.7	3027.3	920.3	923.9	1024.8	1226.4	1392.1	1345.3	1262.4	1291.3	1285.9
75°	9898.0	2643.8	787.0	803.2	880.7	1091.4	1240.8	1204.8	1120.2	1120.2	1114.7
77.5°	6188.1	1847.8	653.7	662.7	747.4	934.7	1066.1	1035.5	954.5	927.5	920.3
80°	2308.8	954.5	511.5	522.3	574.5	736.5	882.5	853.6	770.8	740.2	711.4
82.5°	873.5	479.0	376.4	367.4	423.2	561.9	691.6	657.3	592.5	518.6	497.0
85°	329.6	237.8	230.5	223.3	248.5	333.2	428.7	421.4	353.0	300.7	295.4
87.5°	86.5	77.5	90.1	66.6	70.2	63.1	64.8	27.0	12.6	5.4	3.6
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)