

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: P454616

Luminaire Tested: **GALN-SA5D-727-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454616
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-727-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32584 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

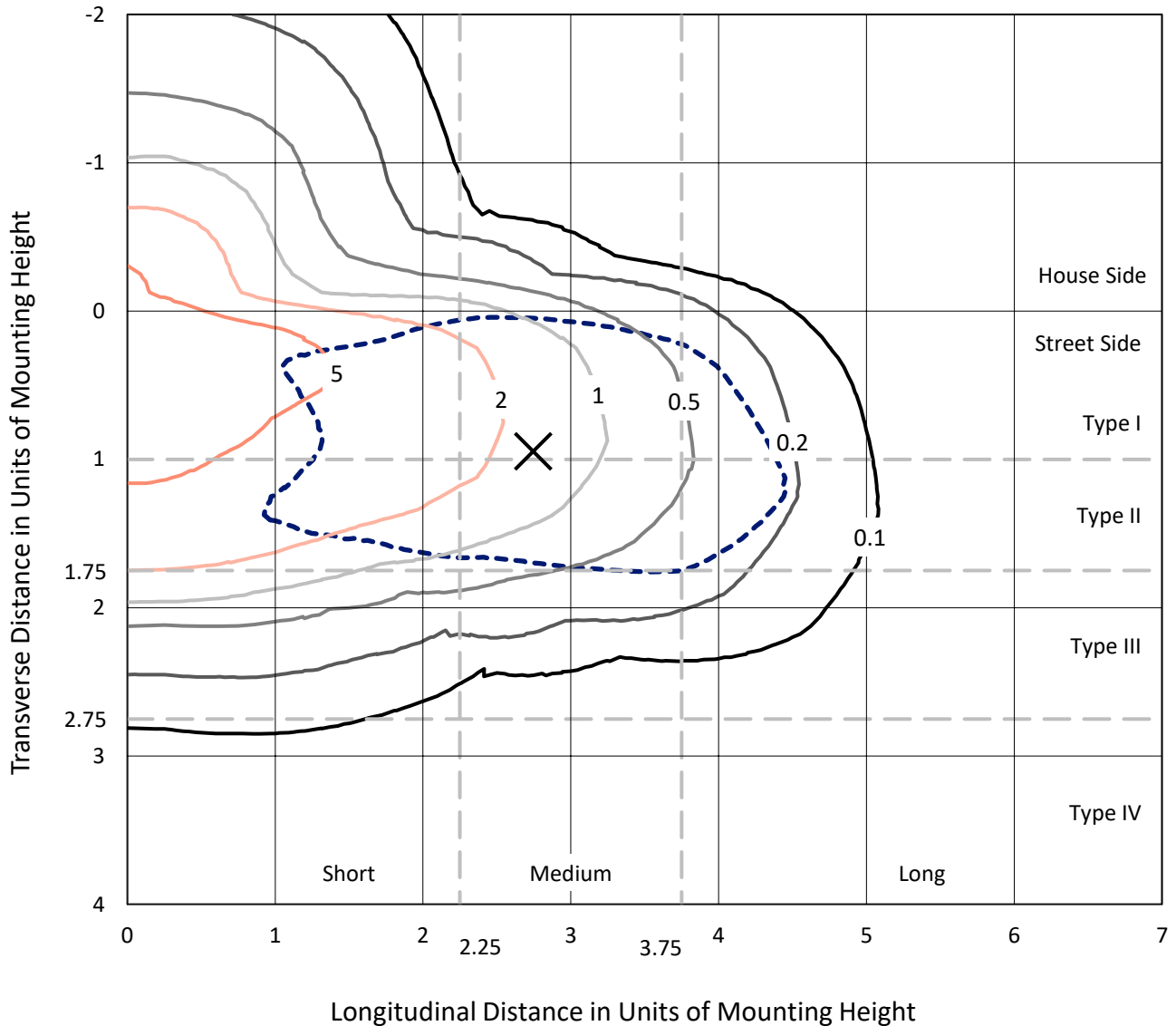
Input Watts (W): 309
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

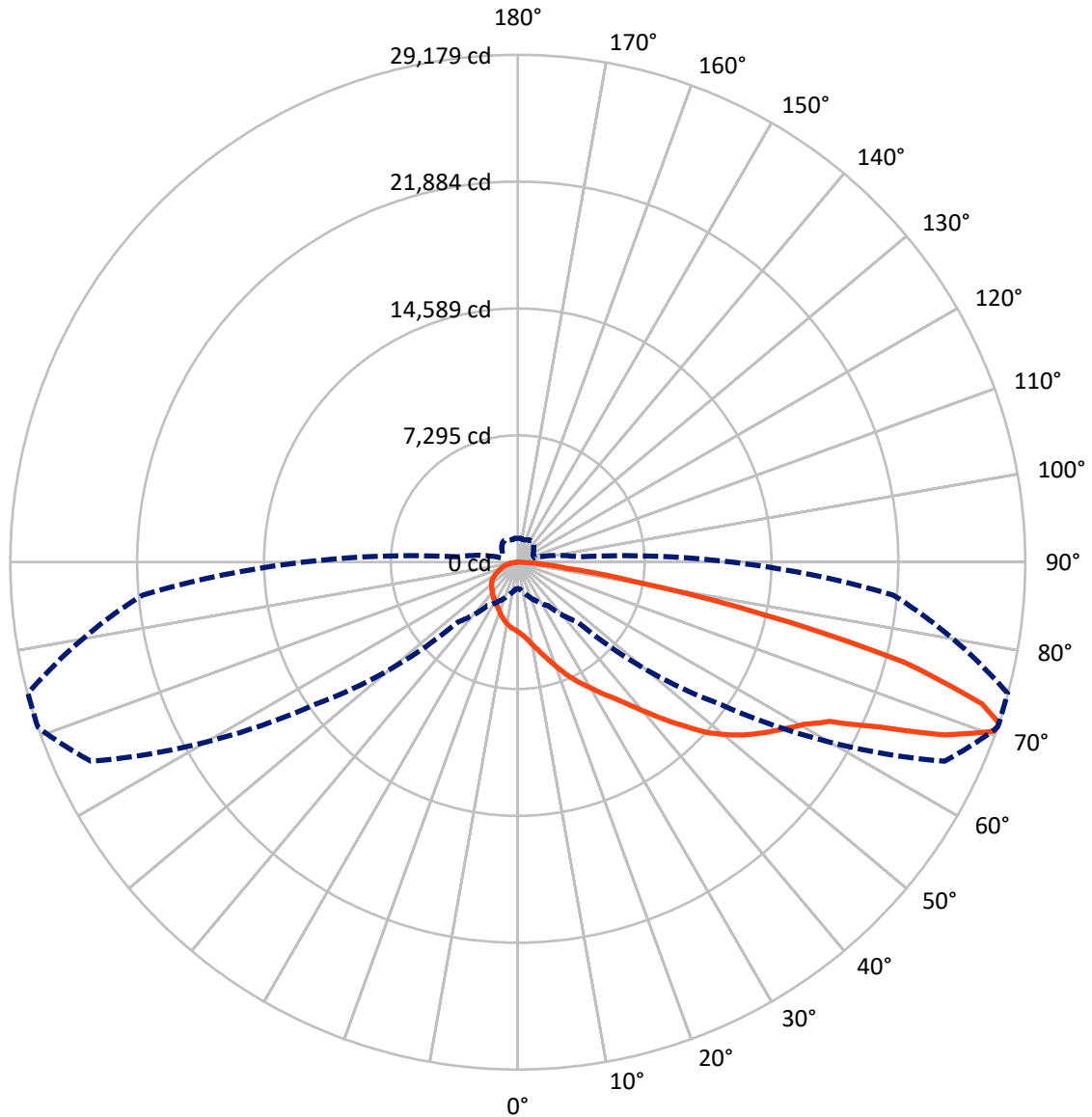
× Max cd
 - - - 1/2 Max cd



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	5860.2	0.0	5860.2
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	26723.9	0.0	26723.9
	% Fixture	82.0	0.0	82.0
Total	Lumens	32584.0	0.0	32584.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	401.5	1.2
10°-20°	1304.5	4.0
20°-30°	2279.8	7.0
30°-40°	3390.9	10.4
40°-50°	4996.1	15.3
50°-60°	6994.6	21.5
60°-70°	7823.2	24.0
70°-80°	4778.7	14.7
80°-90°	614.7	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°	32584.0	100.0
0°-180°	32584.0	100.0

Coefficient of Utilization



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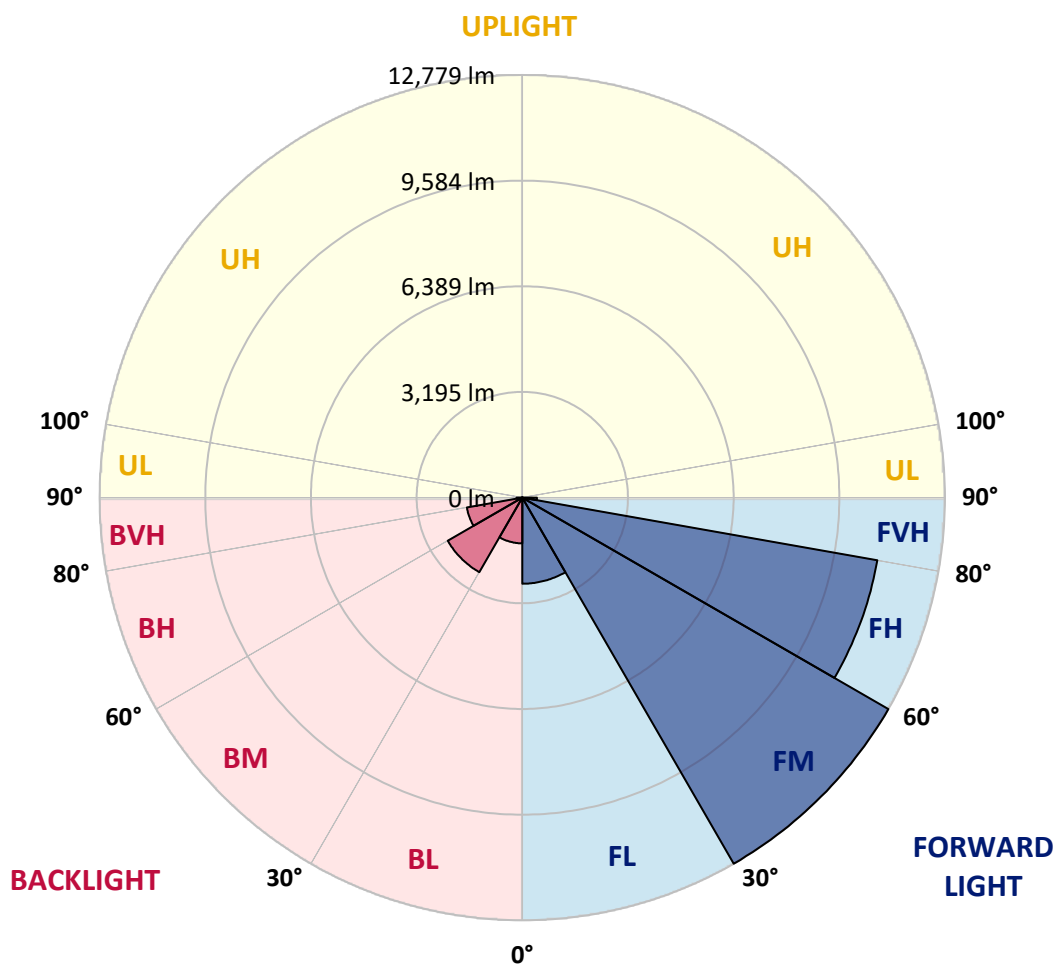
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2603.5	8.0			
FM	(30°-60°)	12778.8	39.2			
FH	(60°-80°)	10899.3	33.4			G4/12000
FVH	(80°-90°)	442.3	1.4			G3/500
BL	(0°-30°)	1382.4	4.2	B3/2500		
BM	(30°-60°)	2602.7	8.0	B3/5000		
BH	(60°-80°)	1702.6	5.2	B3/2500		G3/2500
BVH	(80°-90°)	172.4	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°	3999.0	3999.0	3999.0	3999.0	3999.0	3999.0	3999.0	3999.0	3999.0	3999.0	3999.0
2.5°	4439.6	4418.1	4419.9	4389.5	4350.1	4307.1	4246.2	4192.5	4149.5	4124.4	4051.0
5°	4919.6	4898.1	4871.2	4804.9	4776.3	4670.6	4536.3	4414.5	4321.4	4269.5	4122.6
7.5°	5308.2	5302.8	5295.6	5258.0	5184.6	5037.8	4923.1	4711.8	4573.9	4475.4	4224.7
10°	5548.2	5557.1	5562.5	5569.6	5539.2	5462.2	5304.6	5037.8	4862.2	4736.9	4357.2
12.5°	5669.9	5678.9	5709.3	5775.6	5816.8	5807.8	5678.9	5417.4	5175.7	5010.9	4498.7
15°	5745.2	5759.5	5813.2	5901.0	6038.9	6126.6	6063.9	5822.2	5557.1	5361.9	4667.0
17.5°	5827.5	5843.7	5902.8	6028.1	6209.0	6398.8	6466.9	6259.1	5970.8	5738.0	4855.1
20°	5874.1	5895.6	5979.8	6144.5	6355.8	6631.6	6857.3	6748.0	6432.9	6175.0	5071.8
22.5°	5949.3	5967.2	6038.9	6214.4	6466.9	6812.5	7247.7	7224.4	6946.8	6613.7	5310.0
25°	6153.5	6182.1	6217.9	6323.6	6567.2	6997.0	7571.9	7733.0	7444.7	7072.2	5528.5
27.5°	6538.5	6561.8	6560.0	6574.3	6712.2	7156.4	7853.0	8236.3	7939.0	7536.0	5739.8
30°	6977.3	6986.2	6993.4	6961.2	6991.6	7319.3	8110.9	8734.1	8436.9	8012.4	5924.2
32.5°	7511.0	7528.9	7468.0	7385.6	7360.5	7561.1	8324.0	9232.0	9026.1	8496.0	6106.9
35°	8141.4	8187.9	8064.3	7919.3	7817.2	7908.5	8610.6	9740.6	9629.6	9113.8	6348.7
37.5°	8861.3	8918.6	8804.0	8519.2	8374.2	8399.2	8984.9	10369.2	10392.5	9817.6	6708.7
40°	9450.5	9525.7	9529.3	9126.3	8906.1	8934.7	9459.4	11046.2	11313.0	10688.0	7133.1
42.5°	9839.1	9912.5	9989.5	9753.2	9522.1	9685.1	10012.8	11780.4	12348.1	11744.6	7725.9
45°	10265.3	10331.6	10374.6	10267.1	10138.2	10560.8	10680.8	12561.3	13451.3	12924.8	8374.2
47.5°	10759.6	10833.1	10874.2	10772.2	10723.8	11329.1	11400.8	13290.1	14629.7	14071.0	9090.5
50°	11418.7	11474.2	11452.7	11388.2	11377.5	11918.3	12092.0	13972.5	15602.2	15304.9	9833.7
52.5°	12238.9	12305.2	12328.4	12237.1	12195.9	12339.2	12649.0	14593.9	16486.9	16365.1	10627.1
55°	12735.0	12840.6	13195.2	13338.5	13437.0	12883.6	13249.0	15279.8	17280.2	17482.6	11479.6
57.5°	12099.2	12235.3	13028.7	13745.0	14670.9	14244.7	14099.6	15996.2	18073.6	18566.1	12500.4
60°	10548.3	10578.7	11601.3	12921.2	14783.7	15994.4	15874.4	17135.2	18933.2	19658.5	13845.3
62.5°	7317.6	7382.0	8590.9	10696.9	13390.4	16624.8	18893.8	19101.6	20165.4	21293.6	15817.1
65°	3773.4	3689.2	4790.6	6723.0	10095.2	15127.6	21340.2	22717.4	22837.3	23851.0	18593.0
67.5°	2322.8	2360.4	2876.2	3925.6	5969.0	10994.2	21084.1	27135.5	26503.3	26990.4	21170.0
70°	1744.3	1790.9	2145.5	2686.3	3639.1	6286.0	16956.1	28206.4	29089.3	28964.0	21954.4
71°	1516.9	1565.2	1934.2	2444.6	3057.0	4851.5	14285.9	27085.3	29178.9	29157.4	21658.9
72.5°	1293.0	1323.5	1611.8	2070.3	2577.1	3400.9	10732.8	24291.5	27934.2	28648.8	20604.1
75°	1015.4	1038.7	1167.7	1579.6	2029.1	2088.2	5759.5	18211.5	22943.0	24304.1	17153.1
77.5°	827.4	843.5	909.8	1173.0	1565.2	1479.3	3021.2	11853.9	14373.6	15743.7	10104.2
80°	657.3	675.2	714.6	795.2	1173.0	1054.8	1441.7	6006.6	6943.3	6928.9	4033.1
82.5°	510.4	515.8	562.3	583.8	802.3	748.6	780.8	2543.1	2817.1	2910.2	1456.0
85°	322.4	338.5	497.9	447.7	480.0	438.8	385.0	1010.1	1244.7	1226.8	582.0
87.5°	98.5	103.9	168.3	189.8	213.1	191.6	141.5	297.3	363.5	394.0	145.1
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°	3999.0	3999.0	3999.0	3999.0	3999.0	3999.0	3999.0	3999.0	3999.0	3999.0	3999.0
2.5°	4022.3	4002.6	3932.8	3875.5	3821.7	3762.6	3712.5	3698.2	3685.6	3680.3	3678.5
5°	4059.9	4000.8	3862.9	3750.1	3660.6	3578.2	3526.2	3503.0	3479.7	3479.7	3486.9
7.5°	4113.7	4006.2	3793.1	3624.7	3511.9	3434.9	3397.3	3393.7	3399.1	3404.5	3406.3
10°	4172.8	4002.6	3691.0	3481.5	3381.2	3345.4	3347.2	3377.6	3406.3	3427.8	3431.3
12.5°	4230.1	3981.1	3571.0	3347.2	3282.7	3289.9	3340.0	3408.1	3463.6	3494.0	3495.8
15°	4294.5	3947.1	3426.0	3220.0	3198.5	3254.0	3347.2	3451.0	3535.2	3585.3	3590.7
17.5°	4348.3	3889.8	3273.7	3096.4	3123.3	3225.4	3354.3	3488.6	3590.7	3653.4	3664.1
20°	4409.2	3816.4	3116.1	2978.2	3055.2	3193.1	3340.0	3485.1	3590.7	3651.6	3665.9
22.5°	4457.5	3712.5	2965.7	2881.5	2994.4	3153.7	3291.6	3408.1	3494.0	3526.2	3547.7
25°	4477.2	3581.8	2824.2	2802.7	2946.0	3089.3	3182.4	3248.7	3275.5	3271.9	3280.9
27.5°	4466.5	3431.3	2702.4	2740.1	2885.1	2989.0	3035.5	3030.2	2981.8	2937.0	2958.5
30°	4421.7	3252.2	2600.4	2675.6	2806.3	2863.6	2856.5	2786.6	2695.3	2611.1	2616.5
32.5°	4341.1	3058.8	2505.4	2602.2	2695.3	2720.4	2672.0	2580.7	2449.9	2340.7	2324.6
35°	4273.0	2874.4	2421.3	2518.0	2584.2	2571.7	2525.1	2406.9	2288.7	2192.0	2175.9
37.5°	4262.3	2716.8	2340.7	2423.1	2460.7	2442.8	2385.5	2285.2	2242.2	2168.8	2159.8
40°	4319.6	2605.7	2258.3	2322.8	2340.7	2326.4	2263.7	2206.4	2245.8	2227.9	2227.9
42.5°	4475.4	2546.6	2184.9	2222.5	2236.8	2247.6	2202.8	2154.4	2202.8	2120.4	2093.5
45°	4722.6	2548.4	2118.6	2124.0	2167.0	2204.6	2174.1	2102.5	2077.4	1912.7	1880.4
47.5°	5086.1	2609.3	2064.9	2030.9	2107.9	2170.6	2127.6	2023.7	1912.7	1803.4	1783.7
50°	5510.5	2718.6	2016.5	1934.2	2029.1	2127.6	2095.3	1973.6	1858.9	1792.7	1780.1
52.5°	5981.6	2856.5	1957.4	1826.7	1932.4	2107.9	2102.5	1966.4	1808.8	1764.0	1753.3
55°	6563.6	2992.6	1884.0	1701.3	1846.4	2091.8	2082.8	1907.3	1798.0	1765.8	1762.2
57.5°	7240.5	3189.6	1778.3	1574.2	1747.9	2025.5	2005.8	1871.5	1762.2	1738.9	1737.2
60°	8331.2	3495.8	1627.9	1457.8	1647.6	1909.1	1934.2	1810.6	1704.9	1699.5	1697.8
62.5°	9765.7	3925.6	1472.1	1337.8	1531.2	1758.6	1830.3	1728.2	1644.0	1670.9	1674.5
65°	11746.4	4287.4	1310.9	1235.7	1402.3	1613.6	1731.8	1651.2	1576.0	1627.9	1627.9
67.5°	13037.6	4294.5	1164.1	1130.0	1271.5	1491.8	1627.9	1559.9	1488.2	1576.0	1579.6
70°	12769.0	3762.6	1042.3	1019.0	1144.4	1361.1	1513.3	1459.6	1377.2	1456.0	1427.3
71°	12335.6	3467.2	993.9	976.0	1094.2	1298.4	1459.6	1414.8	1332.4	1384.4	1368.2
72.5°	11644.3	3010.5	915.1	918.7	1019.0	1219.6	1384.4	1337.8	1255.4	1284.1	1278.7
75°	9842.7	2629.0	782.6	798.7	875.7	1085.3	1233.9	1198.1	1113.9	1113.9	1108.6
77.5°	6153.5	1837.4	650.1	659.0	743.2	929.5	1060.2	1029.8	949.2	922.3	915.1
80°	2295.9	949.2	508.6	519.4	571.3	732.5	877.5	848.9	766.5	736.1	707.4
82.5°	868.6	476.4	374.3	365.3	420.9	558.8	687.7	653.7	589.2	515.8	494.3
85°	327.7	236.4	229.2	222.1	247.1	331.3	426.2	419.1	351.0	299.1	293.7
87.5°	86.0	77.0	89.5	66.3	69.8	62.7	64.5	26.9	12.5	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)