

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: P454647

Luminaire Tested: **GALN-SA5D-730-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454647
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA5D-730-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35957 lumens
Efficiency: N/A
Efficacy: 116.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

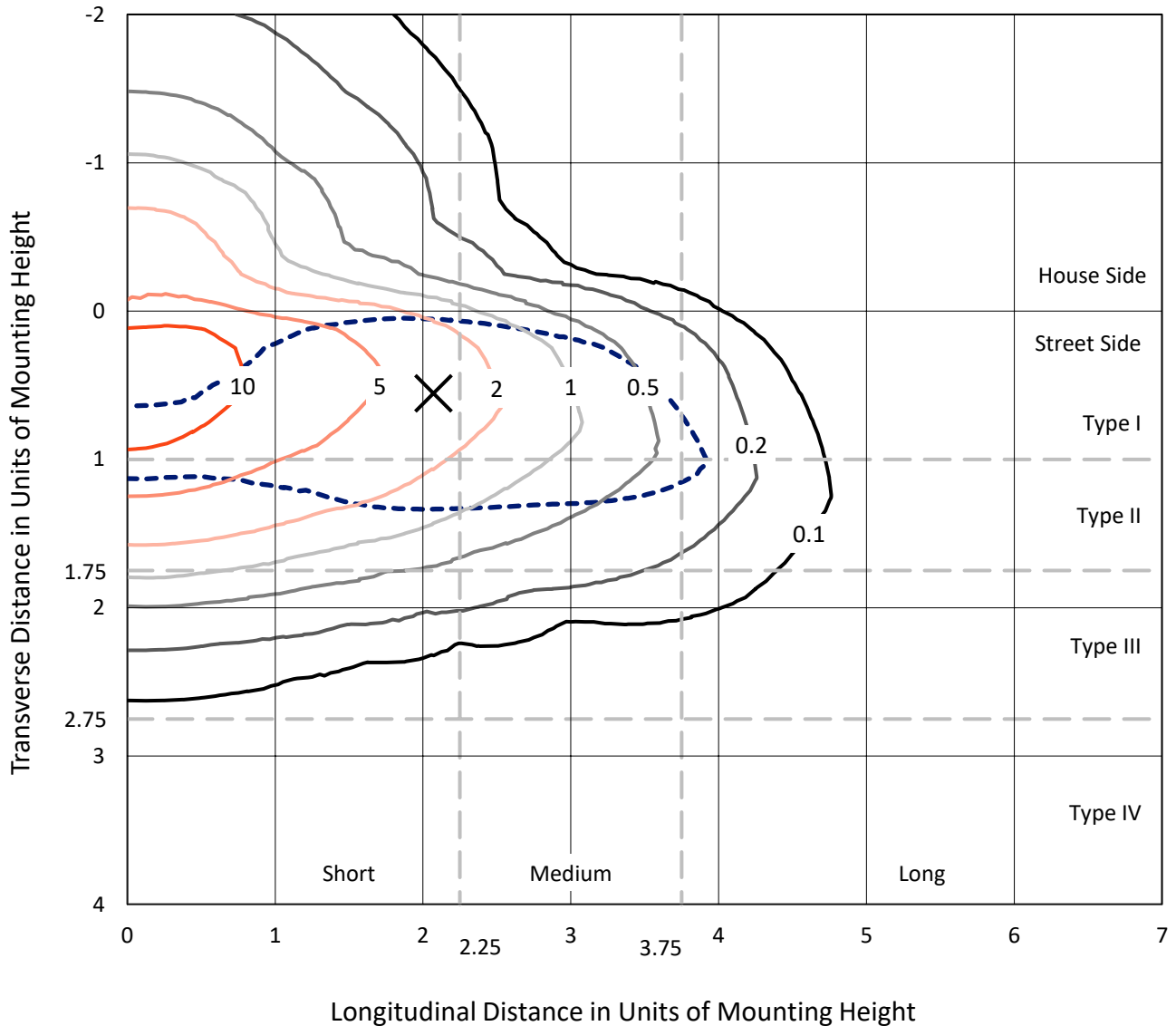
Input Watts (W): 309
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

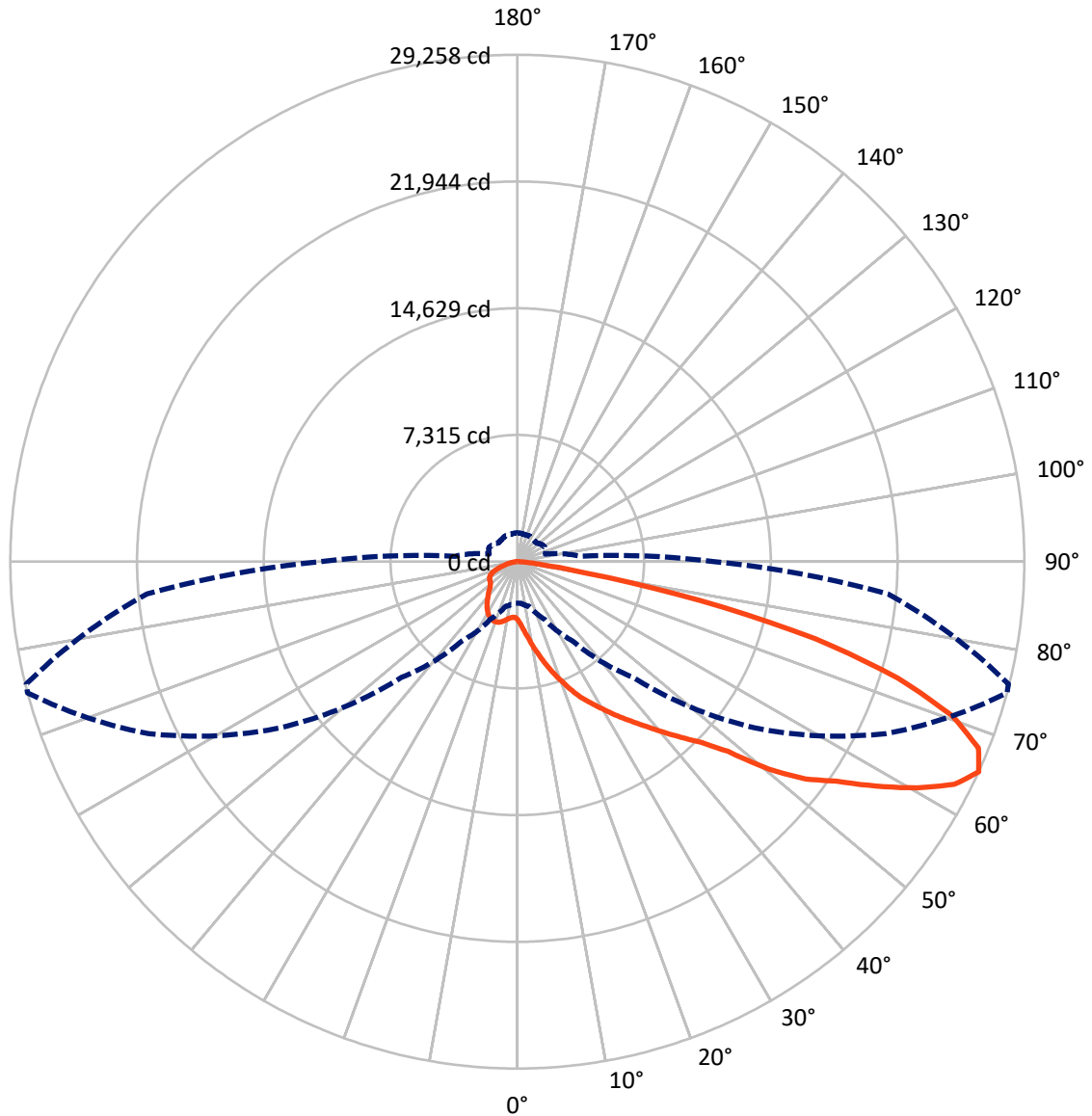
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6044.8	0.0	6044.8
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	29912.2	0.0	29912.2
	% Fixture	83.2	0.0	83.2
Total	Lumens	35957.0	0.0	35957.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	405.9	1.1
10°-20°	1589.9	4.4
20°-30°	3071.1	8.5
30°-40°	4988.4	13.9
40°-50°	6862.0	19.1
50°-60°	8101.7	22.5
60°-70°	7098.4	19.7
70°-80°	3388.8	9.4
80°-90°	450.9	1.3
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°	35957.0	100.0
0°-180°	35957.0	100.0

Coefficient of Utilization



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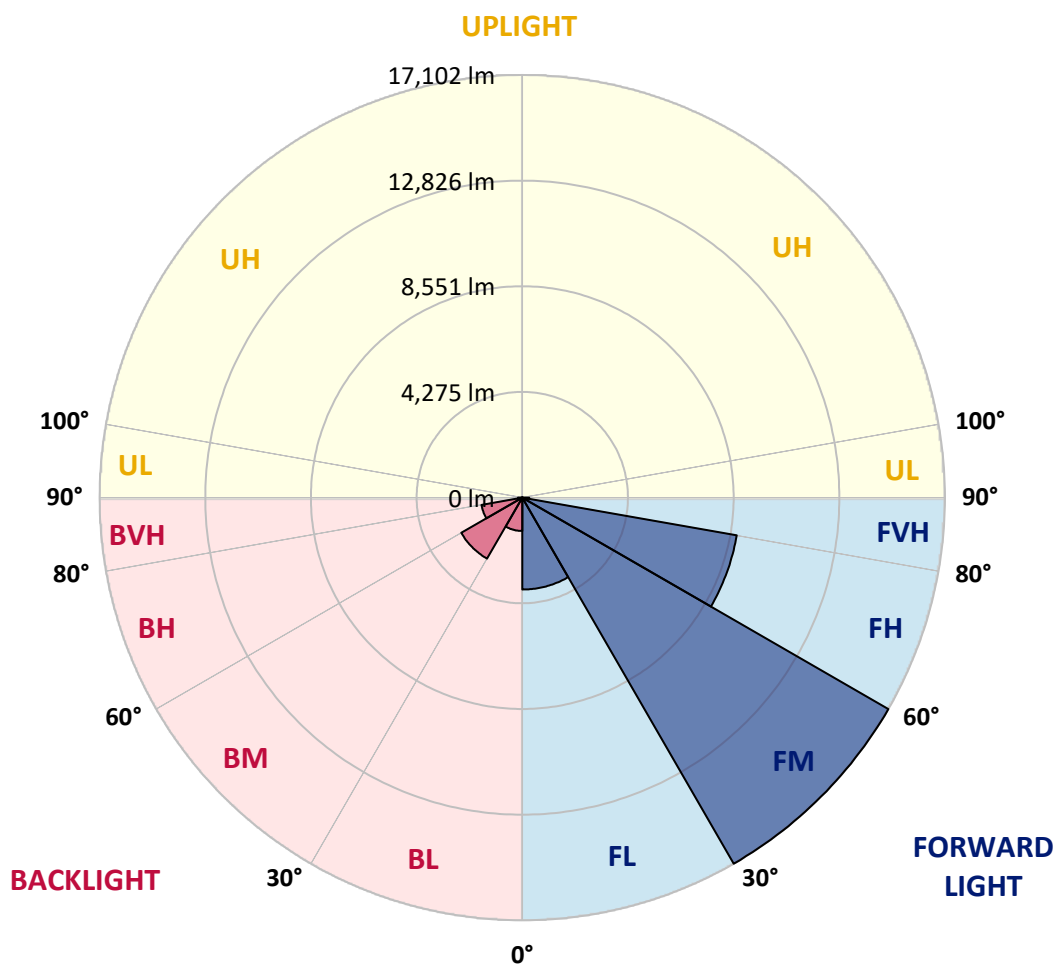
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3717.4	10.3			
FM	(30°-60°)	17101.9	47.6			
FH	(60°-80°)	8811.1	24.5			G4/12000
FVH	(80°-90°)	281.8	0.8			G3/500
BL	(0°-30°)	1349.5	3.8	B3/2500		
BM	(30°-60°)	2850.1	7.9	B3/5000		
BH	(60°-80°)	1676.1	4.7	B3/2500		G3/2500
BVH	(80°-90°)	169.1	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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3340.9	3340.9	3340.9	3340.9	3340.9	3340.9	3340.9	3340.9	3340.9	3340.9	3340.9
2.5°	4438.9	4409.6	4378.4	4292.6	4200.9	4097.6	3949.4	3807.0	3617.8	3612.0	3471.5
5°	5669.5	5650.0	5511.5	5431.6	5219.0	4936.2	4696.3	4323.8	3978.6	3937.7	3664.6
7.5°	6800.7	6724.6	6672.0	6527.6	6317.0	5954.3	5490.1	4986.9	4409.6	4355.0	3902.5
10°	7653.0	7645.2	7617.9	7493.0	7335.1	6974.3	6459.4	5737.8	4955.7	4848.4	4191.2
12.5°	8290.7	8296.6	8292.7	8290.7	8177.6	7871.4	7313.6	6553.0	5507.6	5431.6	4524.7
15°	8710.0	8768.5	8791.9	8889.5	8899.2	8694.4	8214.7	7340.9	6129.8	6016.7	4883.5
17.5°	8987.0	9016.2	9125.4	9291.2	9425.8	9388.7	8961.6	8070.3	6765.6	6576.4	5256.1
20°	9252.2	9302.9	9386.8	9613.0	9851.0	9960.2	9659.8	8817.3	7395.5	7274.6	5667.6
22.5°	9804.1	9876.3	9905.6	10020.6	10223.5	10416.5	10280.0	9533.1	8085.9	7922.1	6104.4
25°	10738.3	10814.4	10732.5	10705.2	10771.5	10867.1	10837.8	10207.9	8737.3	8503.3	6517.9
27.5°	11955.3	11965.1	11805.2	11653.0	11489.2	11440.4	11350.7	10806.6	9302.9	9107.9	6933.3
30°	13262.0	13215.2	12950.0	12675.0	12398.0	12125.0	11867.6	11383.9	9932.9	9708.6	7340.9
32.5°	14475.1	14449.8	14155.3	13728.1	13260.1	13002.6	12481.9	11967.0	10607.7	10391.2	7760.2
35°	15383.9	15421.0	15097.3	14631.1	14120.2	13892.0	13234.7	12579.4	11305.9	11069.9	8216.6
37.5°	16029.5	16010.0	15723.3	15319.6	14871.0	14672.1	14114.3	13248.4	12056.7	11830.5	8715.9
40°	16259.6	16247.9	16035.3	15740.9	15456.1	15385.9	15034.8	13970.0	12916.8	12651.6	9316.6
42.5°	16113.4	16138.7	15998.3	15918.3	15865.7	15916.4	15949.5	14915.9	13854.9	13611.1	9968.0
45°	15664.8	15651.1	15631.6	15762.3	16058.7	16392.2	16854.5	15809.1	14874.9	14679.9	10841.7
47.5°	14863.2	14960.7	15009.5	15370.3	16017.8	16807.7	17895.9	17006.6	16355.2	16185.5	12173.8
50°	13741.8	13819.8	14108.5	14750.1	15715.5	16963.7	18914.0	18964.7	18824.3	18506.4	13620.9
52.5°	11990.4	12111.3	12706.2	13882.2	15095.3	16899.3	19530.3	20643.9	20829.2	20591.2	15046.5
55°	10030.4	10200.1	10828.1	12370.7	14241.1	16548.3	19955.4	21617.1	22356.3	22135.9	16419.6
57.5°	8111.3	8290.7	8936.3	10430.2	12751.0	15772.1	20234.3	22701.5	24435.3	24148.6	18128.0
60°	6079.1	6266.3	6820.2	8359.0	10629.1	14254.7	20045.2	23641.5	26512.3	26389.5	19838.4
62.5°	3922.0	4128.8	4610.5	5884.0	8169.8	12181.6	19033.0	24160.3	28310.5	28162.3	21086.6
65°	2389.1	2412.5	2677.8	3652.9	5591.5	9431.6	16717.9	23471.8	29258.4	29213.5	21466.9
67.5°	1544.6	1581.7	1702.6	2188.2	3352.6	6551.0	13367.3	21199.7	28704.5	28688.9	20681.0
70°	1304.7	1316.5	1371.1	1476.4	1948.3	3972.8	9386.8	17578.0	26600.1	26600.1	18791.1
72.5°	1166.3	1181.9	1201.4	1234.5	1390.6	2250.6	5601.3	13683.3	22966.7	23118.8	15994.4
75°	1059.0	1055.1	1066.8	1072.7	1185.8	1470.5	2896.2	10120.1	17767.2	17463.0	11582.8
77.5°	906.9	912.7	906.9	932.2	1047.3	1119.5	1470.5	6790.9	10767.6	10373.6	5813.8
80°	745.0	754.8	764.5	780.1	895.2	850.3	883.5	3095.1	3982.5	3898.6	1796.2
82.5°	559.7	573.4	589.0	626.0	704.1	561.7	557.8	1322.3	1437.4	1316.5	661.2
85°	226.2	267.2	403.7	440.8	442.7	308.1	343.3	551.9	587.0	573.4	259.4
87.5°	52.7	62.4	130.7	197.0	181.4	115.1	126.8	179.4	204.8	189.2	87.8
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°	3340.9	3340.9	3340.9	3340.9	3340.9	3340.9	3340.9	3340.9	3340.9	3340.9	3340.9
2.5°	3407.2	3338.9	3221.9	3132.2	3067.8	3011.3	2976.2	2954.7	2946.9	2944.9	2946.9
5°	3522.2	3401.3	3216.0	3099.0	3034.7	2997.6	2976.2	2974.2	2976.2	2978.1	2972.3
7.5°	3680.2	3506.6	3264.8	3155.6	3106.8	3079.5	3069.8	3065.9	3067.8	3065.9	3065.9
10°	3890.8	3652.9	3360.4	3247.2	3206.3	3175.1	3159.5	3149.7	3141.9	3134.1	3130.2
12.5°	4122.9	3814.8	3463.7	3354.5	3296.0	3247.2	3212.1	3186.8	3169.2	3151.7	3147.8
15°	4382.3	3986.4	3578.8	3426.7	3342.8	3270.6	3210.2	3169.2	3138.0	3112.7	3110.7
17.5°	4630.0	4148.3	3656.8	3459.8	3337.0	3235.5	3155.6	3099.0	3060.0	3026.9	3023.0
20°	4895.2	4302.4	3691.9	3438.4	3278.4	3155.6	3050.3	2982.0	2937.1	2900.1	2894.2
22.5°	5162.4	4433.0	3688.0	3370.1	3177.0	3032.7	2921.5	2849.4	2796.7	2759.7	2746.0
25°	5417.9	4538.3	3639.3	3260.9	3036.6	2886.4	2773.3	2707.0	2660.2	2615.3	2615.3
27.5°	5648.1	4600.8	3547.6	3128.3	2892.3	2734.3	2644.6	2584.1	2541.2	2512.0	2494.4
30°	5874.3	4630.0	3422.8	2960.6	2740.2	2605.6	2533.4	2498.3	2459.3	2426.2	2422.3
32.5°	6077.1	4624.2	3266.7	2796.7	2595.8	2500.3	2471.0	2443.7	2402.8	2356.0	2344.3
35°	6274.1	4585.1	3081.5	2617.3	2474.9	2437.9	2445.7	2406.7	2332.6	2274.0	2264.3
37.5°	6488.6	4514.9	2878.6	2471.0	2373.5	2408.6	2428.1	2342.3	2221.4	2129.7	2108.3
40°	6736.3	4435.0	2668.0	2324.8	2293.5	2381.3	2381.3	2223.3	2057.6	2001.0	1985.4
42.5°	7026.9	4368.7	2492.5	2201.9	2227.2	2315.0	2305.3	2065.4	1997.1	1967.9	1960.0
45°	7487.2	4345.3	2311.1	2094.6	2172.6	2237.0	2157.0	2010.8	1971.8	1948.3	1940.5
47.5°	8214.7	4372.6	2151.2	2014.7	2110.2	2159.0	1991.3	1973.7	1946.4	1913.2	1909.3
50°	8889.5	4347.2	2038.1	1969.8	2055.6	2065.4	1923.0	1928.8	1913.2	1876.2	1868.4
52.5°	9441.4	4267.3	1965.9	1946.4	2008.8	1901.5	1858.6	1880.1	1874.2	1827.4	1819.6
55°	10047.9	4218.5	1930.8	1946.4	1977.6	1759.2	1798.2	1829.4	1821.6	1788.4	1786.5
57.5°	10783.2	4228.2	1905.4	1952.2	1946.4	1687.0	1737.7	1774.8	1772.8	1763.1	1763.1
60°	11536.0	4232.1	1866.4	1950.3	1909.3	1630.4	1675.3	1728.0	1731.9	1737.7	1737.7
62.5°	11785.6	4062.5	1790.4	1915.2	1827.4	1575.8	1616.8	1689.0	1685.1	1700.7	1702.6
65°	11319.5	3592.4	1677.3	1835.2	1722.1	1536.8	1571.9	1638.2	1616.8	1657.8	1665.6
67.5°	10303.4	2972.3	1501.7	1690.9	1605.1	1495.9	1542.7	1568.0	1529.0	1609.0	1610.9
70°	8905.1	2320.9	1279.4	1486.1	1472.5	1453.0	1519.3	1480.3	1425.7	1523.2	1503.7
72.5°	7446.2	1772.8	1022.0	1215.0	1295.0	1388.6	1478.3	1367.2	1291.1	1320.4	1285.2
75°	5593.5	1310.6	821.1	951.7	1078.5	1296.9	1441.3	1230.6	1113.6	1086.3	1078.5
77.5°	2851.3	856.2	614.3	711.9	809.4	1172.1	1390.6	1070.7	922.5	879.6	860.1
80°	1018.1	532.4	433.0	491.5	546.1	1008.3	1215.0	885.4	715.8	708.0	715.8
82.5°	472.0	343.3	290.6	321.8	323.7	672.9	926.4	661.2	544.1	826.9	698.2
85°	202.8	171.6	163.8	159.9	148.2	300.3	520.7	355.0	553.9	247.7	228.2
87.5°	60.5	68.3	60.5	44.9	33.2	33.2	52.7	19.5	13.7	9.8	9.8
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)