

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: P300354

Luminaire Tested: **GLNA-AF-10-LED-E1-T4FT-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300354
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-10-LED-E1-T4FT-7050
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 5000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 59070.6 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B4 - U0 - G5

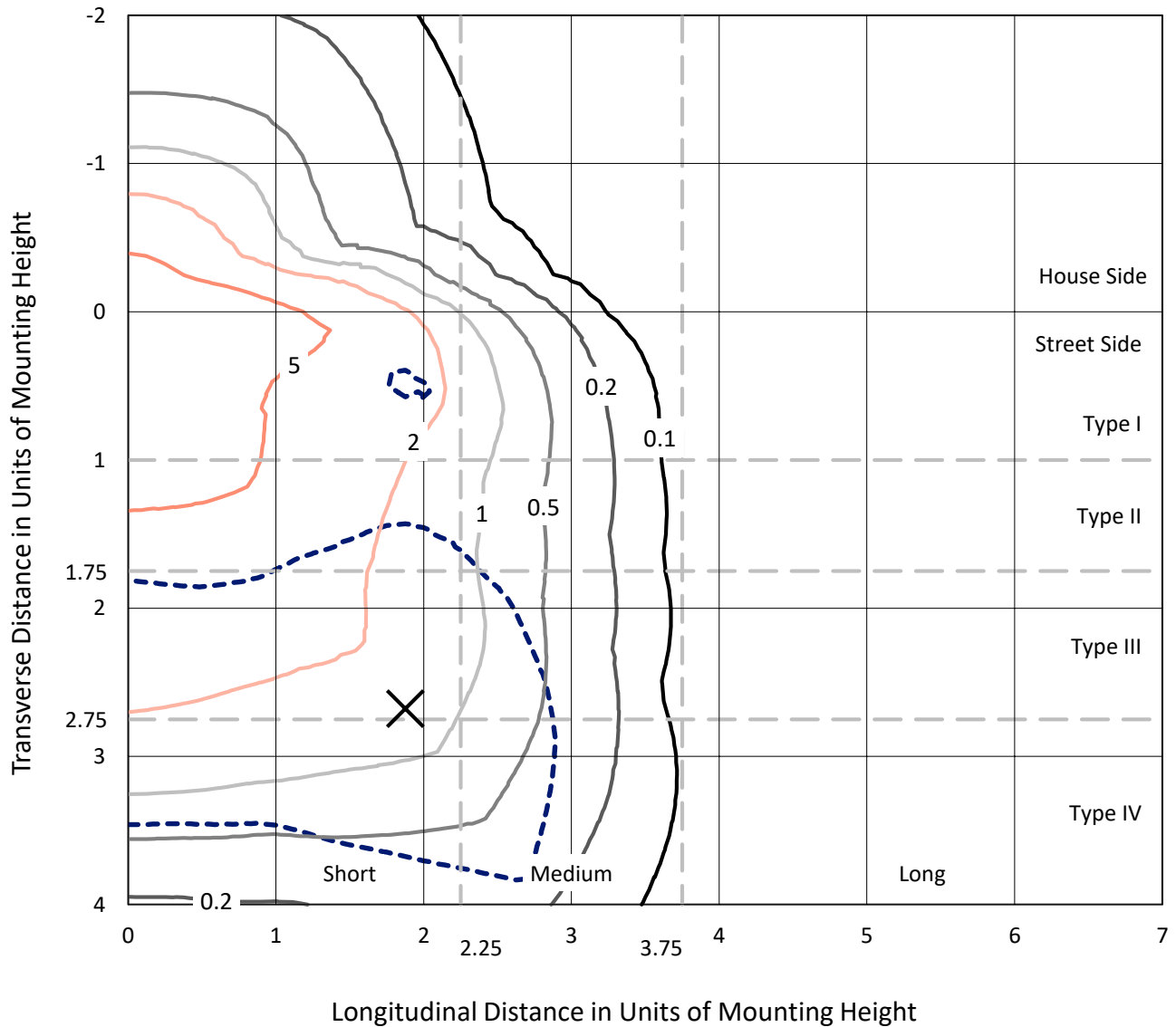
Input Watts (W): 558
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

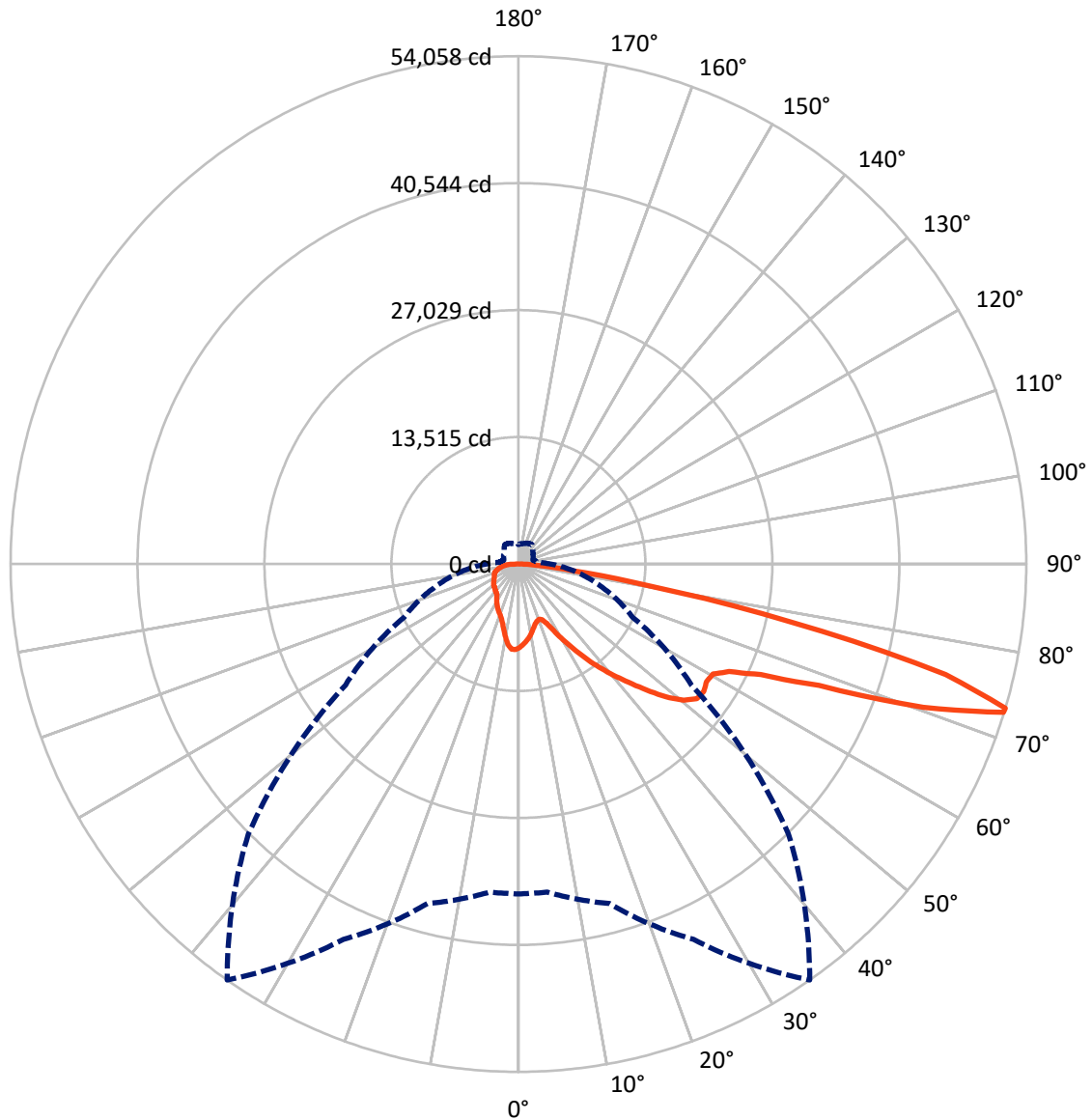
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.9 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11266.4	0.0	11266.4
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	47804.2	0.0	47804.2
	% Fixture	80.9	0.0	80.9
Total	Lumens	59070.6	0.0	59070.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	807.1	1.4
10°-20°	2014.4	3.4
20°-30°	3256.6	5.5
30°-40°	5460.9	9.2
40°-50°	8417.8	14.3
50°-60°	11293.3	19.1
60°-70°	15045.0	25.5
70°-80°	11474.8	19.4
80°-90°	1300.6	2.2
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°	59070.6	100.0
0°-180°	59070.6	100.0

Coefficient of Utilization



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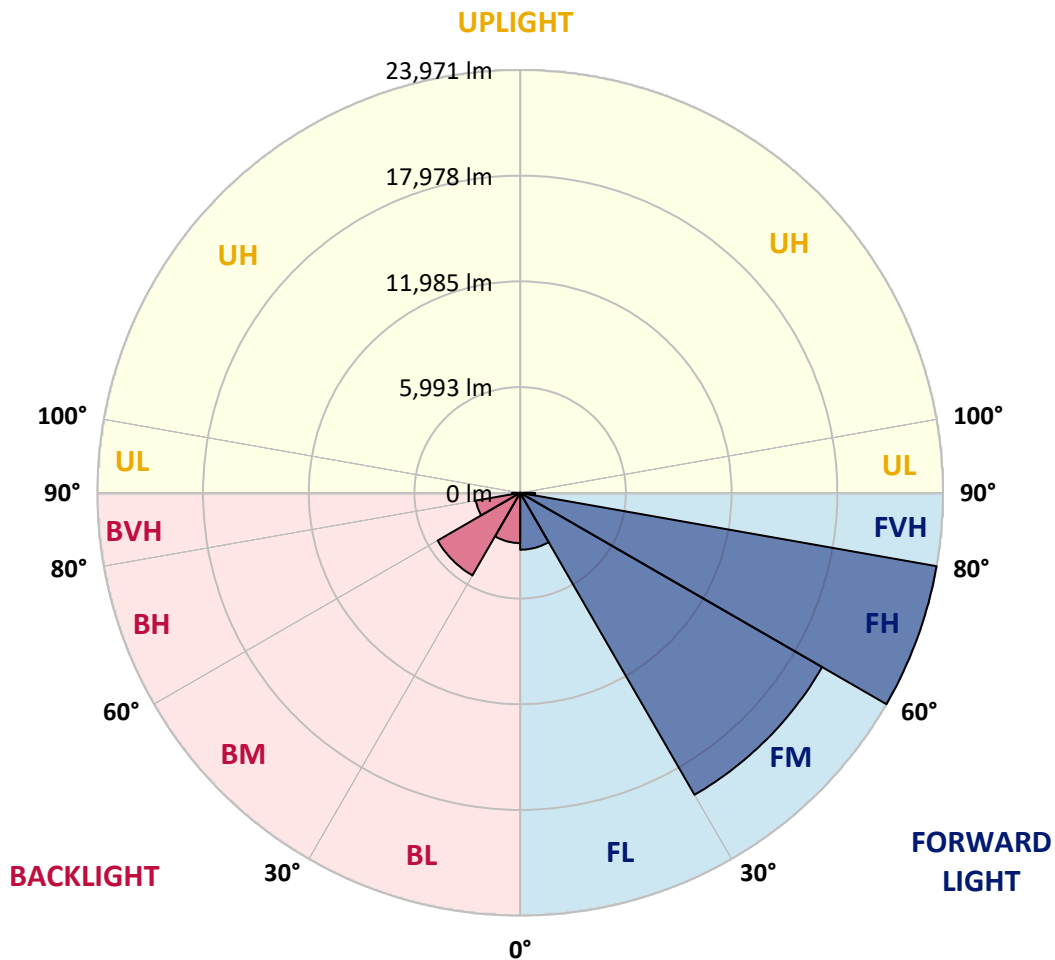
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3227.3	5.5			
FM	(30°-60°)	19765.4	33.5			
FH	(60°-80°)	23970.9	40.6			G5
FVH	(80°-90°)	840.7	1.4			G5
BL	(0°-30°)	2850.9	4.8	B4/5000		
BM	(30°-60°)	5406.6	9.2	B4/8500		
BH	(60°-80°)	2548.9	4.3	B4/5000		G4/5000
BVH	(80°-90°)	459.9	0.8			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	8915.6	8915.6	8915.6	8915.6	8915.6	8915.6	8915.6	8915.6	8915.6	8915.6	8915.6
2.5°	8563.9	8580.9	8561.0	8586.5	8629.1	8674.5	8705.7	8751.1	8802.1	8873.0	8890.1
5°	8161.0	8186.6	8186.6	8232.0	8314.2	8388.0	8456.1	8529.8	8637.6	8759.6	8807.8
7.5°	7718.5	7732.7	7758.2	7826.3	7945.5	8050.4	8146.9	8266.0	8413.5	8575.2	8660.3
10°	7185.2	7205.1	7244.8	7341.3	7502.9	7647.6	7786.6	7951.1	8138.4	8339.8	8447.5
12.5°	6808.0	6802.3	6819.3	6890.2	7032.1	7207.9	7409.3	7619.2	7849.0	8084.5	8214.9
15°	6680.3	6649.1	6583.9	6566.8	6643.4	6819.3	7051.9	7310.1	7585.2	7868.9	8030.6
17.5°	6759.7	6705.8	6527.1	6396.6	6385.3	6518.6	6765.4	7054.8	7372.5	7718.5	7919.9
20°	7259.0	7131.3	6691.7	6388.1	6283.2	6348.4	6564.0	6870.4	7244.8	7704.3	7962.5
22.5°	8453.2	8266.0	7332.7	6768.3	6413.7	6334.2	6495.9	6822.1	7259.0	7880.2	8209.3
25°	10192.1	9925.4	8433.4	7715.7	6983.8	6561.2	6598.1	6932.8	7460.4	8288.7	8685.8
27.5°	11565.0	11392.0	9871.5	9051.8	8022.1	7173.9	6929.9	7210.8	7871.7	8958.1	9363.8
30°	12382.0	12277.0	11409.0	10566.5	9346.8	8149.7	7565.3	7732.7	8515.6	9885.7	10220.5
32.5°	13329.4	13267.0	12841.5	12067.1	10776.4	9431.9	8572.4	8512.8	9378.0	11000.5	11153.7
35°	14310.9	14291.0	14041.4	13485.4	12311.1	11122.5	9908.4	9505.6	10316.9	12157.9	12061.4
37.5°	15224.3	15190.3	15045.6	14722.2	13916.6	12938.0	11270.0	10524.0	11329.6	13264.2	12835.8
40°	16906.4	16639.8	16143.4	15899.4	15539.2	14466.9	12350.8	11474.3	12379.1	14319.4	13505.3
42.5°	18957.3	18523.3	17598.6	17263.9	17212.8	15672.5	13088.3	12396.2	13437.2	15366.1	14163.4
45°	20571.4	20162.9	19365.8	18943.2	19130.4	16764.6	13828.7	13380.5	14526.5	16463.9	14841.4
47.5°	22293.2	21652.2	20596.9	20724.6	21133.1	17797.2	14583.2	14438.6	15720.7	17692.2	15683.8
50°	22355.6	21864.9	21402.5	22165.6	22801.0	18747.4	15527.8	15547.7	17181.6	19238.2	16804.3
52.5°	21059.3	20954.3	21689.0	22888.9	23805.2	19499.1	16602.9	16693.7	19051.0	21013.9	18035.4
55°	20605.4	20486.3	21334.5	22636.5	23941.3	20120.4	17768.8	17933.3	21311.8	22886.1	19235.3
57.5°	21711.7	21447.9	21504.7	22517.3	23609.4	20801.2	19039.6	19371.5	23768.3	24522.9	20006.9
60°	24803.7	24239.2	23166.9	23141.4	23788.2	21822.4	20509.0	20914.6	26321.3	25305.8	19706.2
62.5°	29140.9	28576.4	26568.1	25260.4	25163.9	23507.3	22313.1	22420.9	27796.3	24244.9	17870.9
65°	33835.6	33330.7	31086.9	29240.2	28349.5	26298.6	24409.4	23093.2	27314.1	21325.9	14659.8
67.5°	39534.4	38992.6	37063.7	35358.9	34502.2	30803.2	25881.6	22449.3	24253.4	16520.7	10538.2
70°	43519.9	42966.8	42206.5	43588.0	45684.3	37302.0	26071.7	19831.0	18114.9	10980.7	6342.8
72.5°	38320.3	38062.2	39449.3	45267.3	53998.5	41244.9	23566.9	14438.6	10521.1	5829.3	3670.6
73°	35109.2	35052.5	37418.3	44090.1	54058.1	40637.9	22469.1	13420.2	9023.4	5157.0	3355.8
75°	15854.0	16310.7	21496.1	33676.7	46966.4	33486.7	15814.3	7698.7	5097.5	3562.8	2533.1
77.5°	3809.6	3968.5	6725.7	15993.0	29660.0	19955.8	7165.4	3806.8	3259.3	2516.1	1849.5
80°	1622.6	1676.5	2589.9	5908.7	13964.8	8036.2	3301.9	2550.1	2255.1	1755.9	1296.3
82.5°	902.1	958.8	1469.4	2680.6	5636.4	2740.2	2014.0	1775.7	1483.6	1058.1	842.5
85°	510.6	541.8	859.5	1497.8	2388.5	1100.6	1205.6	1180.0	836.8	544.6	414.2
87.5°	241.1	261.0	414.2	695.0	936.1	431.2	612.7	675.1	524.8	331.9	215.6
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8915.6	8915.6	8915.6	8915.6	8915.6	8915.6	8915.6	8915.6	8915.6	8915.6
2.5°	8909.9	8961.0	9020.6	9051.8	9080.1	9114.2	9148.2	9148.2	9153.9	9156.7
5°	8847.5	8952.5	9046.1	9085.8	9094.3	9094.3	9085.8	9040.4	9000.7	9017.7
7.5°	8717.0	8870.2	8949.6	8935.5	8827.7	8702.8	8597.9	8470.2	8405.0	8393.7
10°	8529.8	8705.7	8719.9	8578.0	8311.4	8044.7	7823.5	7607.9	7505.8	7480.2
12.5°	8322.7	8484.4	8393.7	8101.5	7673.1	7284.5	7003.7	6785.3	6688.8	6663.3
15°	8155.4	8266.0	8036.2	7576.7	7037.7	6626.4	6393.8	6232.1	6164.0	6144.2
17.5°	8067.4	8090.1	7670.3	7049.1	6476.1	6132.8	5988.2	5911.6	5886.1	5871.9
20°	8110.0	7951.1	7321.4	6558.3	6016.5	5775.4	5741.4	5721.5	5715.9	5707.3
22.5°	8322.7	7908.6	7000.9	6093.1	5613.7	5508.8	5537.1	5534.3	5528.6	5523.0
25°	8702.8	7945.5	6688.8	5650.6	5276.2	5253.5	5304.5	5304.5	5281.8	5281.8
27.5°	9204.9	8022.1	6339.9	5230.8	4969.8	4972.6	5012.4	5001.0	4975.5	4958.5
30°	9817.7	8070.3	5931.4	4853.5	4683.3	4672.0	4683.3	4635.1	4558.5	4552.8
32.5°	10444.6	8010.7	5457.7	4518.8	4379.8	4354.3	4345.7	4277.7	4189.7	4164.2
35°	11011.9	7792.3	4975.5	4252.1	4090.5	4033.7	4073.4	4050.7	3971.3	3951.5
37.5°	11426.0	7386.6	4541.5	4016.7	3883.4	3869.2	3894.7	3903.2	3809.6	3789.8
40°	11704.0	6836.3	4169.9	3818.1	3843.7	3789.8	3704.7	3645.1	3616.7	3608.2
42.5°	11928.1	6263.3	3857.8	3724.5	3852.2	3696.2	3511.8	3415.3	3466.4	3489.1
45°	12186.3	5704.5	3596.9	3608.2	3809.6	3588.4	3378.5	3284.8	3304.7	3310.4
47.5°	12540.8	5023.7	3316.0	3421.0	3667.8	3514.6	3296.2	3162.9	3069.3	3026.7
50°	13031.6	4218.1	3023.9	3211.1	3528.8	3460.7	3168.5	3026.7	2853.7	2814.0
52.5°	13372.0	3466.4	2782.8	3035.2	3404.0	3352.9	3066.4	2882.0	2700.5	2666.5
55°	13187.6	2879.2	2572.8	2839.5	3239.5	3219.6	2981.3	2734.5	2592.7	2564.3
57.5°	12265.7	2507.6	2411.2	2655.1	3038.1	3106.1	2867.9	2609.7	2507.6	2487.7
60°	10507.0	2275.0	2309.0	2530.3	2873.5	2992.7	2754.4	2541.6	2473.6	2459.4
62.5°	8152.5	2119.0	2232.4	2439.5	2745.9	2913.2	2692.0	2533.1	2507.6	2490.6
65°	5840.7	1994.2	2150.2	2348.7	2629.6	2839.5	2669.3	2521.8	2527.5	2513.3
67.5°	3968.5	1883.5	2050.9	2246.6	2516.1	2774.2	2638.1	2482.1	2553.0	2536.0
70°	2777.1	1775.7	1934.6	2116.1	2374.3	2683.5	2581.4	2422.5	2416.8	2348.7
72.5°	2167.2	1633.9	1775.7	1934.6	2192.7	2555.8	2467.9	2289.2	2195.6	2124.7
73°	2067.9	1599.9	1736.0	1894.9	2153.0	2524.6	2436.7	2252.3	2147.3	2082.1
75°	1710.5	1452.4	1577.2	1719.0	1982.8	2377.1	2283.5	2084.9	1951.6	1911.9
77.5°	1344.6	1242.5	1361.6	1489.2	1747.4	2161.5	2056.6	1866.5	1792.8	1758.7
80°	995.7	1029.7	1134.7	1248.1	1514.8	1931.8	1838.2	1648.1	1977.1	1894.9
82.5°	700.7	780.1	876.5	978.6	1270.8	1707.7	1594.2	1398.5	1446.7	1202.7
85°	414.2	510.6	601.4	689.3	916.2	1415.5	1316.2	1114.8	913.4	870.9
87.5°	241.1	283.7	309.2	400.0	629.7	1066.6	927.6	825.5	473.7	320.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)