

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: P453746

Luminaire Tested: **GALN-SA4D-740-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453746
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-SA4D-740-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 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: 30777 lumens
Efficiency: N/A
Efficacy: 125.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

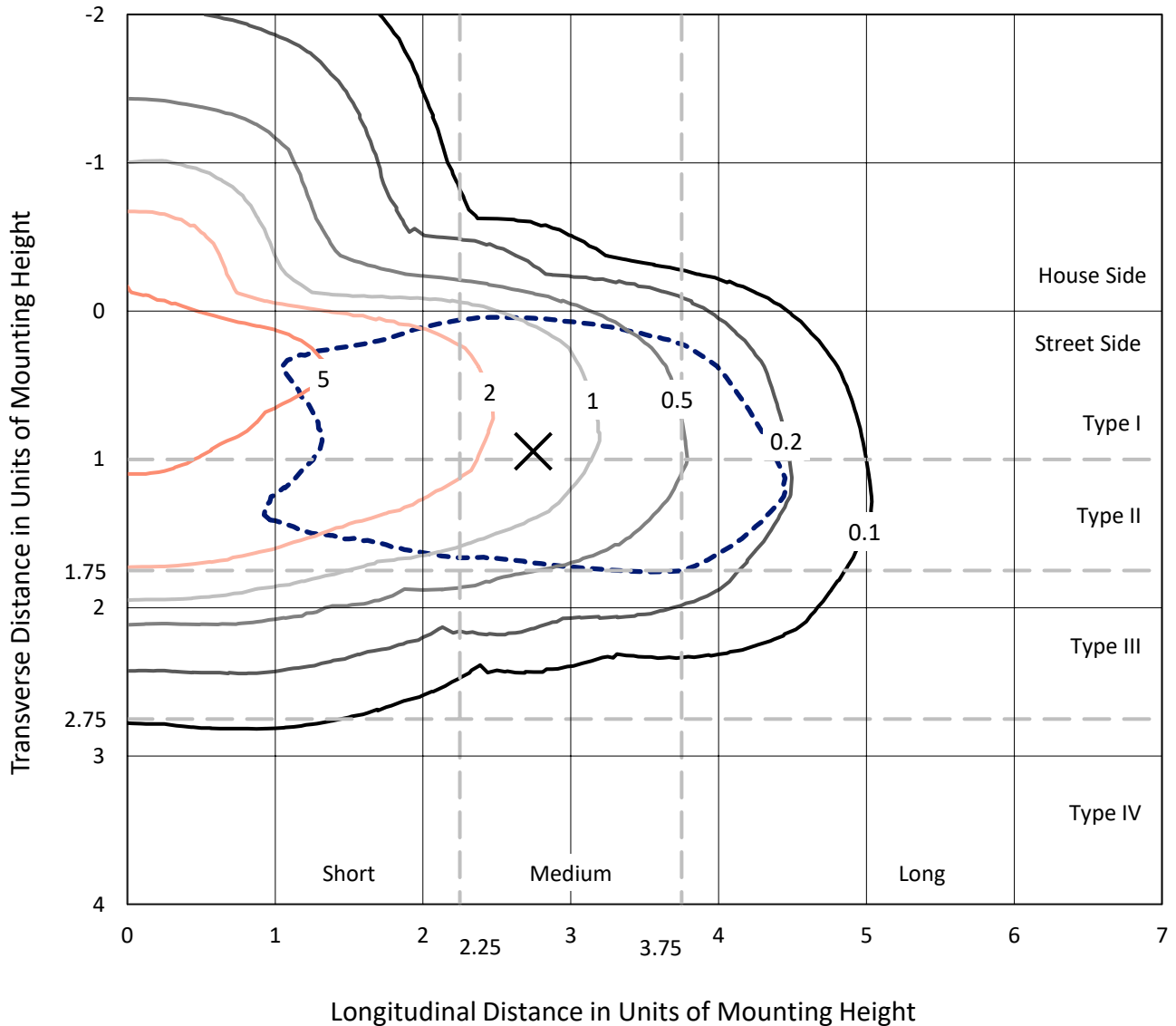
Input Watts (W): 245
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

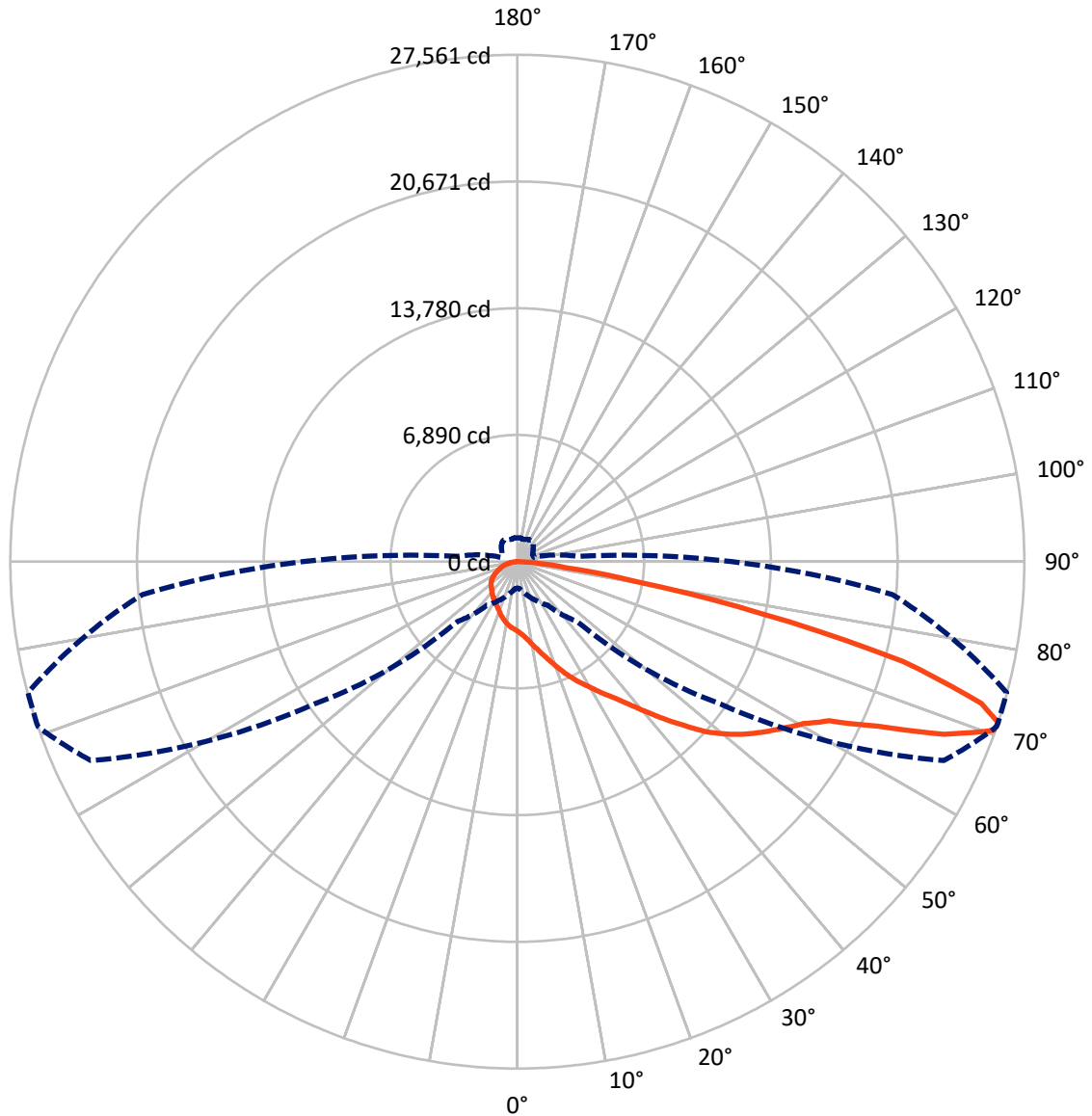
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 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	5535.2	0.0	5535.2
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	25241.8	0.0	25241.8
	% Fixture	82.0	0.0	82.0
Total	Lumens	30777.0	0.0	30777.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	379.3	1.2
10°-20°	1232.2	4.0
20°-30°	2153.4	7.0
30°-40°	3202.9	10.4
40°-50°	4719.0	15.3
50°-60°	6606.7	21.5
60°-70°	7389.3	24.0
70°-80°	4513.7	14.7
80°-90°	580.6	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°	30777.0	100.0
0°-180°	30777.0	100.0

Coefficient of Utilization



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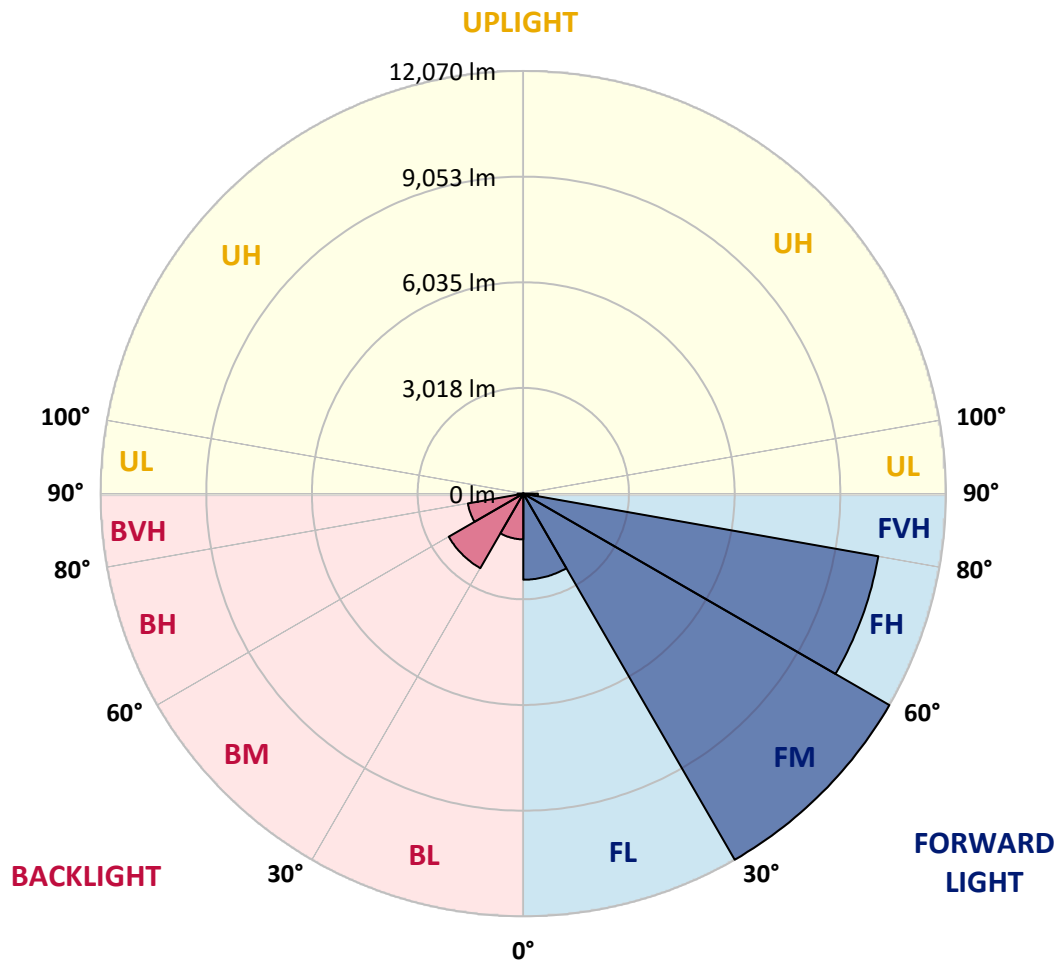
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2459.1	8.0			
FM	(30°-60°)	12070.1	39.2			
FH	(60°-80°)	10294.8	33.4			G4/12000
FVH	(80°-90°)	417.8	1.4			G3/500
BL	(0°-30°)	1305.7	4.2	B3/2500		
BM	(30°-60°)	2458.4	8.0	B2/2500		
BH	(60°-80°)	1608.2	5.2	B3/2500		G3/2500
BVH	(80°-90°)	162.8	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°	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3
2.5°	4193.4	4173.1	4174.8	4146.0	4108.8	4068.2	4010.7	3960.0	3919.4	3895.7	3826.3
5°	4646.7	4626.4	4601.1	4538.5	4511.4	4411.6	4284.7	4169.7	4081.8	4032.7	3894.0
7.5°	5013.8	5008.7	5002.0	4966.4	4897.1	4758.4	4650.1	4450.5	4320.3	4227.2	3990.4
10°	5240.5	5248.9	5254.0	5260.8	5232.0	5159.3	5010.4	4758.4	4592.6	4474.2	4115.6
12.5°	5355.5	5364.0	5392.7	5455.3	5494.2	5485.8	5364.0	5117.0	4888.6	4733.0	4249.2
15°	5426.5	5440.1	5490.8	5573.7	5704.0	5786.9	5727.6	5499.3	5248.9	5064.6	4408.2
17.5°	5504.4	5519.6	5575.4	5693.8	5864.7	6044.0	6108.2	5912.0	5639.7	5419.8	4585.8
20°	5548.3	5568.6	5648.1	5803.8	6003.4	6263.9	6477.0	6373.8	6076.1	5832.5	4790.5
22.5°	5619.4	5636.3	5704.0	5869.7	6108.2	6434.7	6845.8	6823.8	6561.6	6247.0	5015.5
25°	5812.2	5839.3	5873.1	5972.9	6203.0	6609.0	7151.9	7304.2	7031.8	6680.0	5221.9
27.5°	6175.9	6197.9	6196.2	6209.7	6340.0	6759.5	7417.5	7779.5	7498.7	7118.1	5421.5
30°	6590.3	6598.8	6605.6	6575.1	6603.9	6913.4	7661.1	8249.8	7969.0	7568.1	5595.7
32.5°	7094.4	7111.3	7053.8	6976.0	6952.3	7141.8	7862.4	8720.0	8525.5	8024.8	5768.2
35°	7689.9	7733.8	7617.1	7480.1	7383.7	7470.0	8133.1	9200.4	9095.6	8608.4	5996.6
37.5°	8369.9	8424.0	8315.7	8046.8	7909.8	7933.5	8486.6	9794.2	9816.2	9273.2	6336.6
40°	8926.4	8997.4	9000.8	8620.2	8412.2	8439.2	8934.9	10433.6	10685.6	10095.3	6737.5
42.5°	9293.5	9362.8	9435.6	9212.3	8994.1	9148.0	9457.6	11127.1	11663.4	11093.3	7297.4
45°	9696.1	9758.7	9799.2	9697.8	9576.0	9975.2	10088.5	11864.7	12705.4	12208.0	7909.8
47.5°	10162.9	10232.3	10271.2	10174.8	10129.1	10700.9	10768.5	12553.1	13818.4	13290.6	8586.4
50°	10785.4	10837.9	10817.6	10756.7	10746.5	11257.4	11421.5	13197.6	14736.9	14456.1	9288.4
52.5°	11560.2	11622.8	11644.7	11558.5	11519.6	11654.9	11947.5	13784.6	15572.6	15457.5	10037.8
55°	12028.7	12128.5	12463.5	12598.8	12691.8	12169.1	12514.2	14432.5	16321.9	16513.1	10842.9
57.5°	11428.2	11556.8	12306.2	12982.8	13857.3	13454.7	13317.7	15109.1	17071.3	17536.5	11807.1
60°	9963.3	9992.1	10958.0	12204.7	13963.9	15107.4	14994.1	16184.9	17883.2	18568.3	13077.5
62.5°	6911.7	6972.6	8114.4	10103.7	12647.8	15702.8	17846.0	18042.3	19047.0	20112.7	14939.9
65°	3564.1	3484.6	4524.9	6350.1	9535.4	14288.7	20156.7	21457.5	21570.9	22528.3	17561.9
67.5°	2194.0	2229.5	2716.7	3707.9	5638.0	10384.5	19914.8	25630.6	25033.5	25493.6	19996.0
70°	1647.6	1691.6	2026.5	2537.4	3437.3	5937.4	16015.8	26642.2	27476.1	27357.7	20736.9
71°	1432.8	1478.4	1826.9	2309.0	2887.5	4582.5	13493.6	25583.3	27560.7	27540.4	20457.8
72.5°	1221.3	1250.1	1522.4	1955.5	2434.2	3212.3	10137.6	22944.4	26385.1	27060.0	19461.5
75°	959.1	981.1	1102.9	1492.0	1916.5	1972.4	5440.1	17201.5	21670.7	22956.3	16201.8
77.5°	781.5	796.7	859.3	1108.0	1478.4	1397.2	2853.7	11196.5	13576.5	14870.6	9543.8
80°	620.8	637.7	674.9	751.1	1108.0	996.3	1361.7	5673.5	6558.2	6544.7	3809.4
82.5°	482.1	487.2	531.2	551.5	757.8	707.1	737.5	2402.0	2660.8	2748.8	1375.2
85°	304.5	319.7	470.3	422.9	453.3	414.4	363.7	954.0	1175.6	1158.7	549.8
87.5°	93.0	98.1	159.0	179.3	201.3	181.0	133.6	280.8	343.4	372.1	137.0
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°	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3	3777.3
2.5°	3799.3	3780.7	3714.7	3660.6	3609.8	3554.0	3506.6	3493.1	3481.2	3476.2	3474.5
5°	3834.8	3779.0	3648.7	3542.1	3457.6	3379.8	3330.7	3308.7	3286.7	3286.7	3293.5
7.5°	3885.5	3784.0	3582.7	3423.7	3317.2	3244.4	3208.9	3205.5	3210.6	3215.7	3217.4
10°	3941.4	3780.7	3486.3	3288.4	3193.7	3159.8	3161.5	3190.3	3217.4	3237.7	3241.0
12.5°	3995.5	3760.4	3373.0	3161.5	3100.6	3107.4	3154.8	3219.1	3271.5	3300.2	3301.9
15°	4056.4	3728.2	3236.0	3041.4	3021.1	3073.6	3161.5	3259.7	3339.2	3386.5	3391.6
17.5°	4107.1	3674.1	3092.2	2924.7	2950.1	3046.5	3168.3	3295.2	3391.6	3450.8	3460.9
20°	4164.6	3604.7	2943.3	2813.1	2885.8	3016.1	3154.8	3291.8	3391.6	3449.1	3462.6
22.5°	4210.3	3506.6	2801.2	2721.7	2828.3	2978.8	3109.1	3219.1	3300.2	3330.7	3351.0
25°	4228.9	3383.1	2667.6	2647.3	2782.6	2918.0	3005.9	3068.5	3093.9	3090.5	3099.0
27.5°	4218.8	3241.0	2552.6	2588.1	2725.1	2823.2	2867.2	2862.1	2816.5	2774.2	2794.5
30°	4176.5	3071.9	2456.2	2527.2	2650.7	2704.8	2698.0	2632.1	2545.8	2466.3	2471.4
32.5°	4100.4	2889.2	2366.5	2457.8	2545.8	2569.5	2523.8	2437.5	2314.1	2210.9	2195.7
35°	4036.1	2715.0	2287.0	2378.3	2440.9	2429.1	2385.1	2273.5	2161.8	2070.5	2055.3
37.5°	4025.9	2566.1	2210.9	2288.7	2324.2	2307.3	2253.2	2158.4	2117.8	2048.5	2040.0
40°	4080.1	2461.2	2133.1	2194.0	2210.9	2197.3	2138.1	2084.0	2121.2	2104.3	2104.3
42.5°	4227.2	2405.4	2063.7	2099.2	2112.8	2122.9	2080.6	2035.0	2080.6	2002.8	1977.4
45°	4460.7	2407.1	2001.1	2006.2	2046.8	2082.3	2053.6	1985.9	1962.2	1806.6	1776.1
47.5°	4804.1	2464.6	1950.4	1918.2	1991.0	2050.2	2009.6	1911.5	1806.6	1703.4	1684.8
50°	5205.0	2567.8	1904.7	1826.9	1916.5	2009.6	1979.1	1864.1	1755.8	1693.3	1681.4
52.5°	5649.8	2698.0	1848.9	1725.4	1825.2	1991.0	1985.9	1857.3	1708.5	1666.2	1656.0
55°	6199.6	2826.6	1779.5	1607.0	1744.0	1975.8	1967.3	1801.5	1698.3	1667.9	1664.5
57.5°	6839.0	3012.7	1679.7	1486.9	1651.0	1913.2	1894.6	1767.7	1664.5	1642.5	1640.8
60°	7869.2	3301.9	1537.6	1376.9	1556.2	1803.2	1826.9	1710.2	1610.4	1605.3	1603.6
62.5°	9224.1	3707.9	1390.5	1263.6	1446.3	1661.1	1728.8	1632.4	1552.9	1578.2	1581.6
65°	11095.0	4049.6	1238.2	1167.2	1324.5	1524.1	1635.7	1559.6	1488.6	1537.6	1537.6
67.5°	12314.6	4056.4	1099.5	1067.4	1201.0	1409.1	1537.6	1473.4	1405.7	1488.6	1492.0
70°	12060.9	3554.0	984.5	962.5	1080.9	1285.6	1429.4	1378.6	1300.8	1375.2	1348.2
71°	11651.5	3274.9	938.8	921.9	1033.5	1226.4	1378.6	1336.3	1258.5	1307.6	1292.4
72.5°	10998.6	2843.5	864.4	867.8	962.5	1152.0	1307.6	1263.6	1185.8	1212.9	1207.8
75°	9296.9	2483.2	739.2	754.4	827.2	1025.1	1165.5	1131.7	1052.2	1052.2	1047.1
77.5°	5812.2	1735.5	614.0	622.5	702.0	877.9	1001.4	972.7	896.5	871.2	864.4
80°	2168.6	896.5	480.4	490.6	539.6	691.9	828.9	801.8	724.0	695.2	668.2
82.5°	820.4	450.0	353.5	345.1	397.5	527.8	649.6	617.4	556.5	487.2	466.9
85°	309.6	223.3	216.5	209.8	233.4	312.9	402.6	395.8	331.5	282.5	277.4
87.5°	81.2	72.7	84.6	62.6	66.0	59.2	60.9	25.4	11.8	5.1	3.4
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)