

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: P456617

Luminaire Tested: **GALN-SA7D-827-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456617
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-SA7D-827-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 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: 39836 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G5

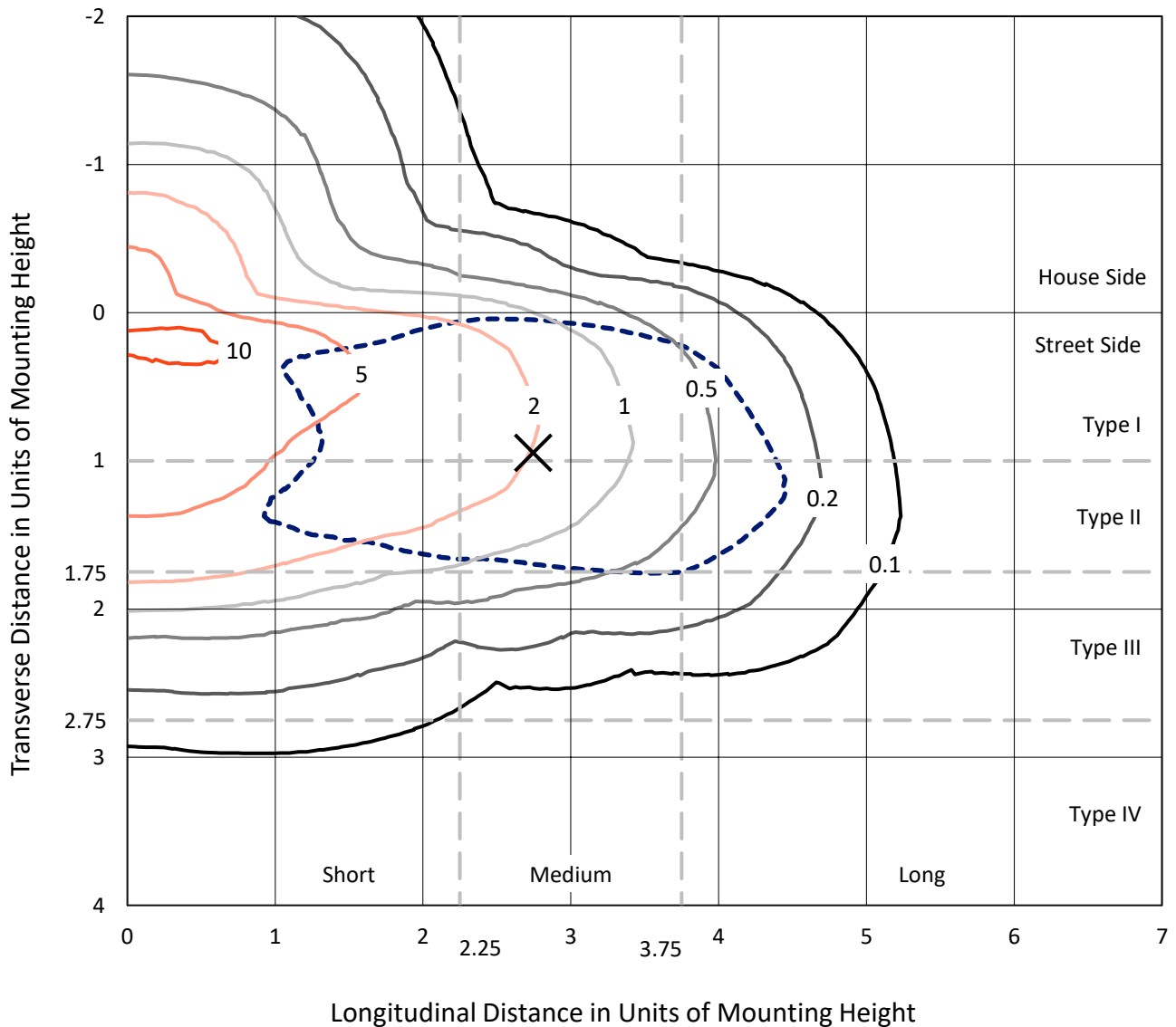
Input Watts (W): 433
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

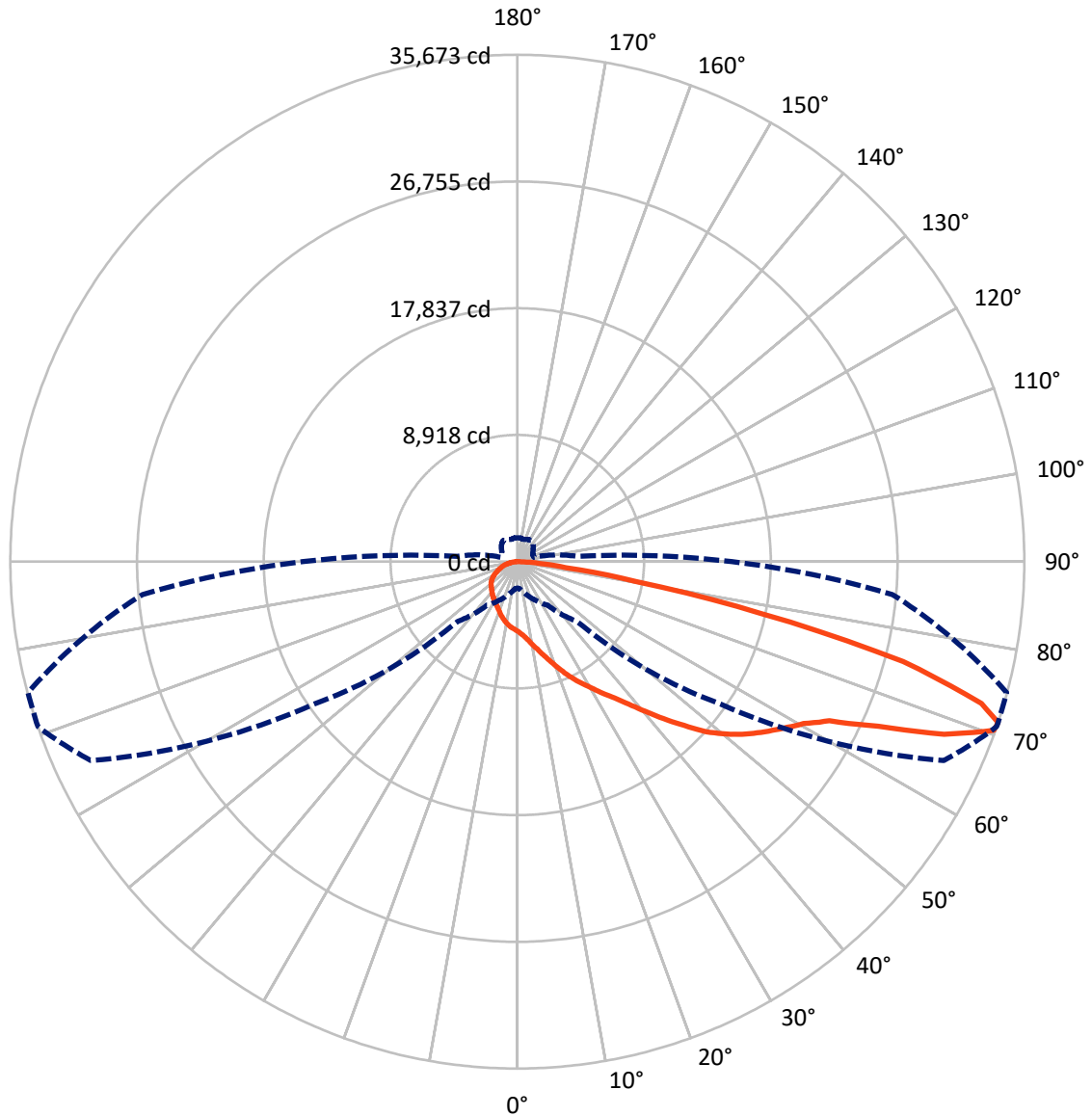
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.1 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	7164.4	0.0	7164.4
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	32671.6	0.0	32671.6
	% Fixture	82.0	0.0	82.0
Total	Lumens	39836.0	0.0	39836.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	490.9	1.2
10°-20°	1594.9	4.0
20°-30°	2787.2	7.0
30°-40°	4145.6	10.4
40°-50°	6108.0	15.3
50°-60°	8551.3	21.5
60°-70°	9564.3	24.0
70°-80°	5842.3	14.7
80°-90°	751.5	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°	39836.0	100.0
0°-180°	39836.0	100.0

Coefficient of Utilization



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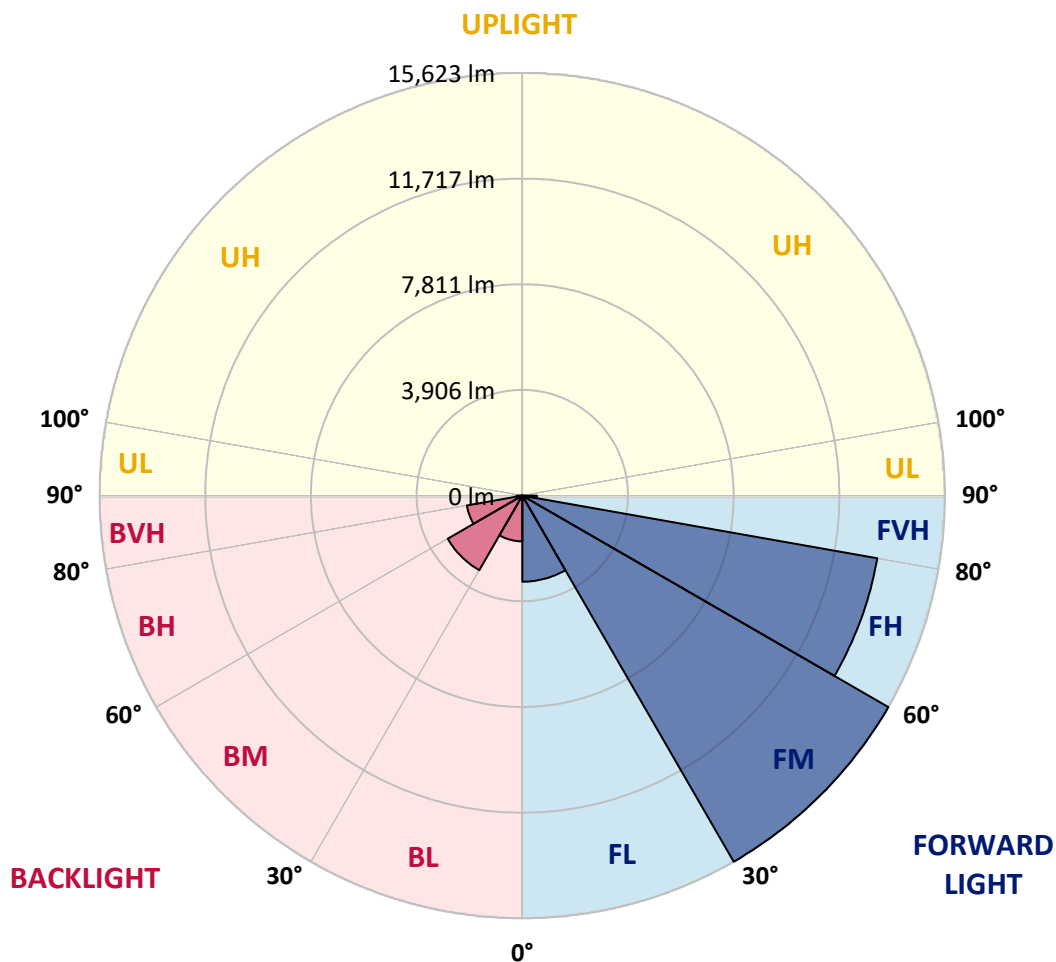
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3182.9	8.0			
FM	(30°-60°)	15622.9	39.2			
FH	(60°-80°)	13325.0	33.4			G5
FVH	(80°-90°)	540.8	1.4			G4/750
BL	(0°-30°)	1690.1	4.2	B3/2500		
BM	(30°-60°)	3182.0	8.0	B3/5000		
BH	(60°-80°)	2081.6	5.2	B3/2500		G3/2500
BVH	(80°-90°)	210.8	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-G5

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	4889.1	4889.1	4889.1	4889.1	4889.1	4889.1	4889.1	4889.1	4889.1	4889.1	4889.1
2.5°	5427.7	5401.4	5403.6	5366.4	5318.2	5265.7	5191.2	5125.5	5073.0	5042.3	4952.6
5°	6014.5	5988.2	5955.4	5874.3	5839.3	5710.1	5545.9	5397.0	5283.2	5219.7	5040.2
7.5°	6489.6	6483.0	6474.3	6428.3	6338.5	6159.0	6018.8	5760.5	5591.9	5471.5	5165.0
10°	6783.0	6793.9	6800.5	6809.2	6772.0	6677.9	6485.2	6159.0	5944.4	5791.1	5327.0
12.5°	6931.9	6942.8	6980.0	7061.0	7111.4	7100.4	6942.8	6623.1	6327.6	6126.1	5499.9
15°	7023.8	7041.3	7107.0	7214.3	7382.9	7490.2	7413.5	7118.0	6793.9	6555.3	5705.8
17.5°	7124.5	7144.2	7216.5	7369.8	7590.9	7823.0	7906.2	7652.2	7299.7	7015.1	5935.6
20°	7181.5	7207.7	7310.6	7512.1	7770.4	8107.6	8383.5	8249.9	7864.6	7549.3	6200.6
22.5°	7273.4	7295.3	7382.9	7597.5	7906.2	8328.7	8860.8	8832.3	8492.9	8085.7	6491.8
25°	7523.0	7558.0	7601.8	7731.0	8028.8	8554.3	9257.1	9454.1	9101.6	8646.2	6758.9
27.5°	7993.7	8022.2	8020.0	8037.5	8206.1	8749.1	9600.8	10069.4	9705.9	9213.3	7017.2
30°	8530.2	8541.1	8549.9	8510.5	8547.7	8948.4	9916.1	10678.0	10314.6	9795.7	7242.8
32.5°	9182.6	9204.5	9130.1	9029.4	8998.7	9243.9	10176.6	11286.7	11034.9	10386.8	7466.1
35°	9953.3	10010.3	9859.2	9681.8	9557.0	9668.7	10527.0	11908.5	11772.8	11142.2	7761.7
37.5°	10833.5	10903.6	10763.4	10415.3	10238.0	10268.6	10984.6	12677.0	12705.5	12002.7	8201.7
40°	11553.8	11645.8	11650.2	11157.5	10888.2	10923.3	11564.8	13504.6	13830.9	13066.7	8720.7
42.5°	12028.9	12118.7	12212.9	11923.8	11641.4	11840.6	12241.3	14402.3	15096.4	14358.5	9445.4
45°	12550.0	12631.0	12683.6	12552.2	12394.6	12911.3	13058.0	15356.9	16445.1	15801.4	10238.0
47.5°	13154.3	13244.1	13294.5	13169.7	13110.5	13850.6	13938.2	16248.0	17885.8	17202.7	11113.7
50°	13960.1	14027.9	14001.7	13922.8	13909.7	14570.9	14783.3	17082.2	19074.6	18711.2	12022.4
52.5°	14962.8	15043.8	15072.3	14960.6	14910.3	15085.4	15464.2	17842.0	20156.2	20007.4	12992.3
55°	15569.3	15698.5	16132.0	16307.2	16427.6	15751.0	16197.7	18680.5	21126.2	21373.6	14034.5
57.5°	14792.0	14958.4	15928.4	16804.2	17936.1	17415.0	17237.7	19556.3	22096.1	22698.2	15282.5
60°	12896.0	12933.2	14183.4	15797.0	18074.1	19554.1	19407.4	20948.8	23147.1	24033.8	16926.8
62.5°	8946.2	9025.0	10502.9	13077.7	16370.7	20324.8	23098.9	23352.9	24653.4	26032.8	19337.4
65°	4613.2	4510.3	5856.8	8219.3	12342.0	18494.4	26089.7	27773.4	27920.1	29159.3	22731.1
67.5°	2839.7	2885.7	3516.3	4799.3	7297.5	13441.1	25776.6	33174.8	32401.9	32997.5	25881.7
70°	2132.5	2189.5	2623.0	3284.2	4449.0	7685.0	20729.9	34484.1	35563.5	35410.3	26840.7
71°	1854.5	1913.6	2364.6	2988.6	3737.4	5931.3	17465.4	33113.5	35673.0	35646.7	26479.4
72.5°	1580.8	1618.0	1970.5	2531.0	3150.6	4157.8	13121.5	29698.0	34151.3	35024.9	25189.8
75°	1241.4	1269.9	1427.5	1931.1	2480.7	2552.9	7041.3	22264.7	28049.3	29713.3	20970.7
77.5°	1011.5	1031.2	1112.3	1434.1	1913.6	1808.5	3693.6	14492.1	17572.7	19247.6	12353.0
80°	803.5	825.4	873.6	972.1	1434.1	1289.6	1762.5	7343.5	8488.6	8471.1	4930.7
82.5°	624.0	630.6	687.5	713.8	980.9	915.2	954.6	3109.0	3444.0	3557.9	1780.0
85°	394.1	413.8	608.7	547.4	586.8	536.4	470.7	1234.9	1521.7	1499.8	711.6
87.5°	120.4	127.0	205.8	232.1	260.5	234.3	173.0	363.5	444.5	481.7	177.3
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°	4889.1	4889.1	4889.1	4889.1	4889.1	4889.1	4889.1	4889.1	4889.1	4889.1	4889.1
2.5°	4917.5	4893.5	4808.1	4738.0	4672.3	4600.1	4538.8	4521.3	4505.9	4499.4	4497.2
5°	4963.5	4891.3	4722.7	4584.7	4475.3	4374.6	4311.1	4282.6	4254.1	4254.1	4262.9
7.5°	5029.2	4897.8	4637.3	4431.5	4293.5	4199.4	4153.4	4149.0	4155.6	4162.2	4164.4
10°	5101.5	4893.5	4512.5	4256.3	4133.7	4089.9	4092.1	4129.3	4164.4	4190.6	4195.0
12.5°	5171.5	4867.2	4365.8	4092.1	4013.3	4022.1	4083.4	4166.6	4234.4	4271.7	4273.8
15°	5250.3	4825.6	4188.5	3936.7	3910.4	3978.3	4092.1	4219.1	4322.0	4383.3	4389.9
17.5°	5316.0	4755.5	4002.3	3785.6	3818.4	3943.2	4100.9	4265.1	4389.9	4466.5	4479.7
20°	5390.5	4665.8	3809.7	3641.1	3735.2	3903.8	4083.4	4260.7	4389.9	4464.3	4481.8
22.5°	5449.6	4538.8	3625.8	3522.9	3660.8	3855.7	4024.2	4166.6	4271.7	4311.1	4337.3
25°	5473.7	4378.9	3452.8	3426.5	3601.7	3776.8	3890.7	3971.7	4004.5	4000.2	4011.1
27.5°	5460.5	4195.0	3303.9	3349.9	3527.2	3654.2	3711.1	3704.6	3645.5	3590.7	3617.0
30°	5405.8	3976.1	3179.1	3271.1	3430.9	3501.0	3492.2	3406.8	3295.2	3192.2	3198.8
32.5°	5307.3	3739.6	3063.1	3181.3	3295.2	3325.8	3266.7	3155.0	2995.2	2861.6	2841.9
35°	5224.1	3514.1	2960.2	3078.4	3159.4	3144.1	3087.2	2942.6	2798.1	2679.9	2660.2
37.5°	5210.9	3321.4	2861.6	2962.4	3008.3	2986.4	2916.4	2793.8	2741.2	2651.4	2640.5
40°	5281.0	3185.7	2760.9	2839.7	2861.6	2844.1	2767.5	2697.4	2745.6	2723.7	2723.7
42.5°	5471.5	3113.4	2671.2	2717.1	2734.6	2747.8	2693.0	2633.9	2693.0	2592.3	2559.5
45°	5773.6	3115.6	2590.1	2596.7	2649.3	2695.2	2658.0	2570.4	2539.8	2338.4	2298.9
47.5°	6218.1	3190.1	2524.5	2482.9	2577.0	2653.6	2601.1	2474.1	2338.4	2204.8	2180.7
50°	6737.0	3323.6	2465.3	2364.6	2480.7	2601.1	2561.7	2412.8	2272.7	2191.7	2176.3
52.5°	7312.8	3492.2	2393.1	2233.3	2362.4	2577.0	2570.4	2404.0	2211.4	2156.6	2143.5
55°	8024.4	3658.6	2303.3	2080.0	2257.3	2557.3	2546.4	2331.8	2198.2	2158.8	2154.4
57.5°	8852.0	3899.4	2174.1	1924.5	2136.9	2476.3	2452.2	2288.0	2154.4	2126.0	2123.8
60°	10185.4	4273.8	1990.2	1782.2	2014.3	2334.0	2364.6	2213.6	2084.4	2077.8	2075.6
62.5°	11939.2	4799.3	1799.7	1635.5	1872.0	2150.1	2237.6	2112.8	2009.9	2042.8	2047.2
65°	14360.7	5241.6	1602.7	1510.7	1714.4	1972.7	2117.2	2018.7	1926.7	1990.2	1990.2
67.5°	15939.3	5250.3	1423.2	1381.6	1554.5	1823.8	1990.2	1907.0	1819.4	1926.7	1931.1
70°	15610.9	4600.1	1274.3	1245.8	1399.1	1664.0	1850.1	1784.4	1683.7	1780.0	1745.0
71°	15081.1	4238.8	1215.2	1193.3	1337.8	1587.4	1784.4	1729.7	1629.0	1692.5	1672.8
72.5°	14235.9	3680.5	1118.8	1123.2	1245.8	1491.0	1692.5	1635.5	1534.8	1569.8	1563.3
75°	12033.3	3214.1	956.8	976.5	1070.7	1326.8	1508.5	1464.8	1361.8	1361.8	1355.3
77.5°	7523.0	2246.4	794.8	805.7	908.6	1136.3	1296.2	1258.9	1160.4	1127.6	1118.8
80°	2806.9	1160.4	621.8	634.9	698.4	895.5	1072.8	1037.8	937.1	899.9	864.8
82.5°	1061.9	582.4	457.6	446.7	514.5	683.1	840.8	799.2	720.3	630.6	604.3
85°	400.7	289.0	280.3	271.5	302.1	405.1	521.1	512.3	429.1	365.6	359.1
87.5°	105.1	94.1	109.5	81.0	85.4	76.6	78.8	32.8	15.3	6.6	4.4
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)