

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: P457531

Luminaire Tested: **GALN-SA8D-827-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P457531
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA8D-827-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 46371 lumens
Efficiency: N/A
Efficacy: 94.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

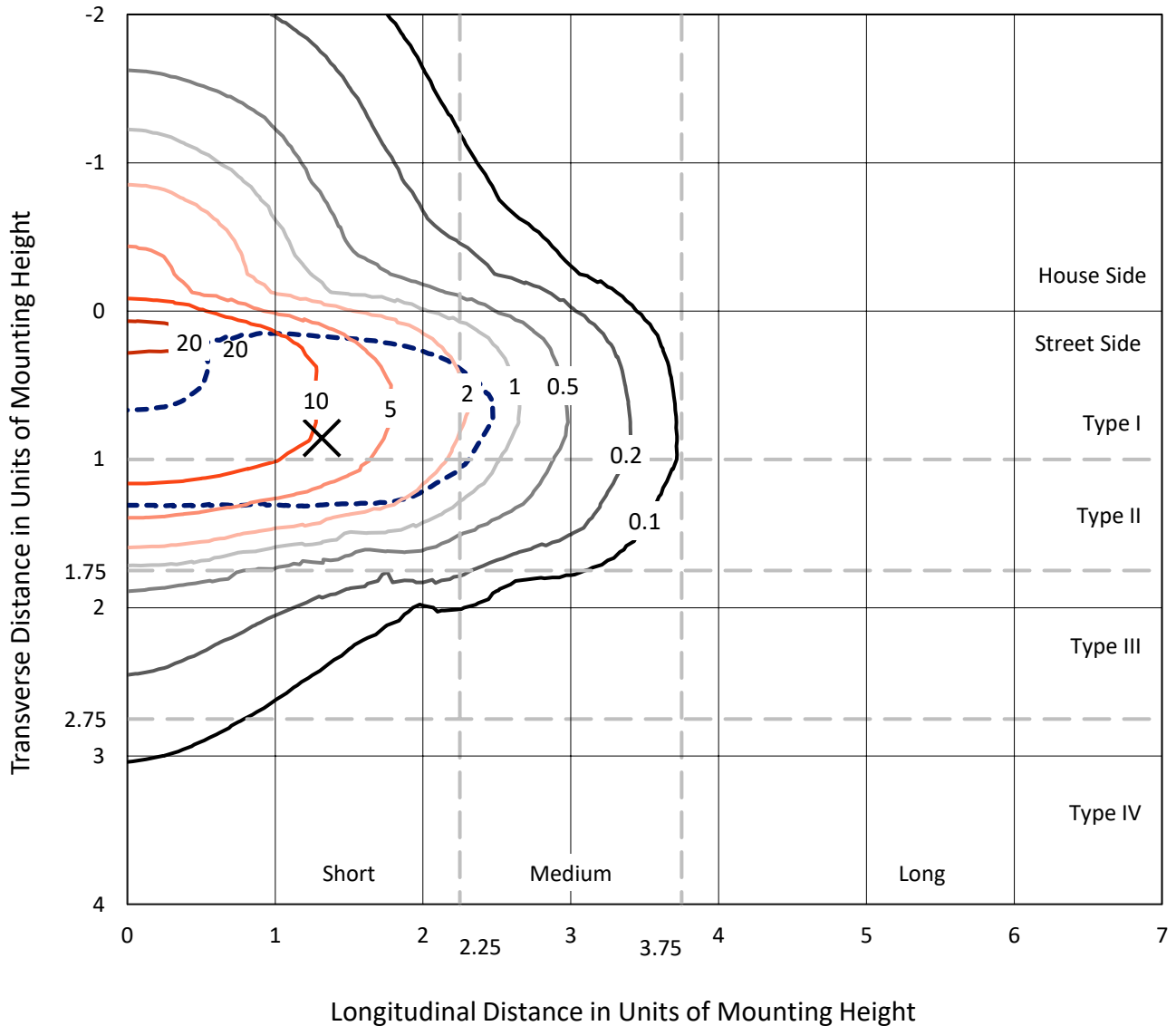
Input Watts (W): 493
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P457531
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Iso-Footcandle Lines of Horizontal Illumination

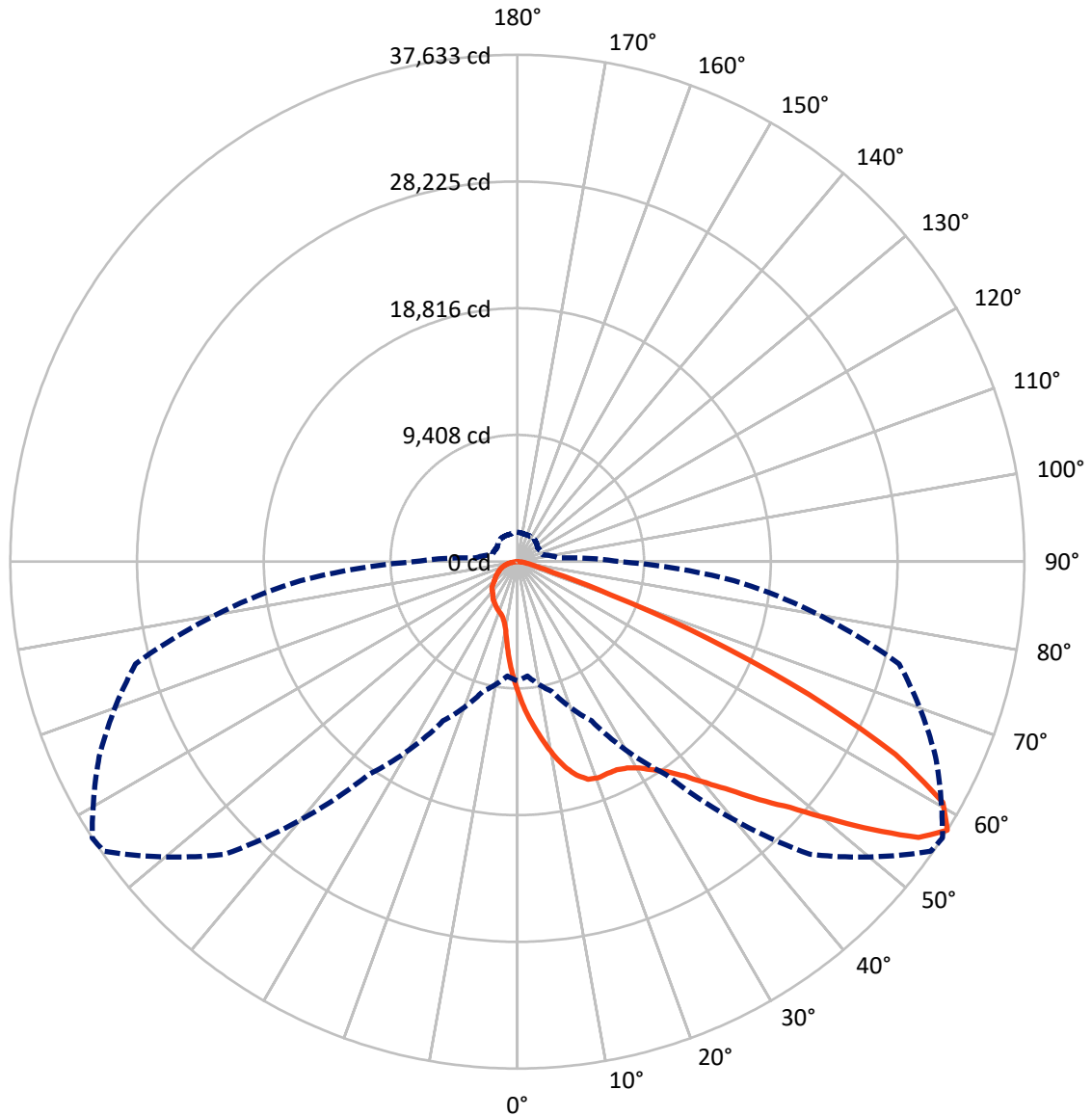
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 23.7 fc
 Type II - Short - N/A

REPORT NUMBER: P457531
CATALOG NUMBER: GALN-SA8D-827-U-AFL

Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7051.7	0.0	7051.7
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	39319.3	0.0	39319.3
	% Fixture	84.8	0.0	84.8
Total	Lumens	46371.0	0.0	46371.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	936.3	2.0
10°-20°	2759.3	6.0
20°-30°	4581.9	9.9
30°-40°	6901.7	14.9
40°-50°	10362.3	22.3
50°-60°	11614.8	25.0
60°-70°	6797.6	14.7
70°-80°	2010.7	4.3
80°-90°	406.4	0.9
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°	46371.0	100.0
0°-180°	46371.0	100.0

Coefficient of Utilization



REPORT NUMBER: P457531

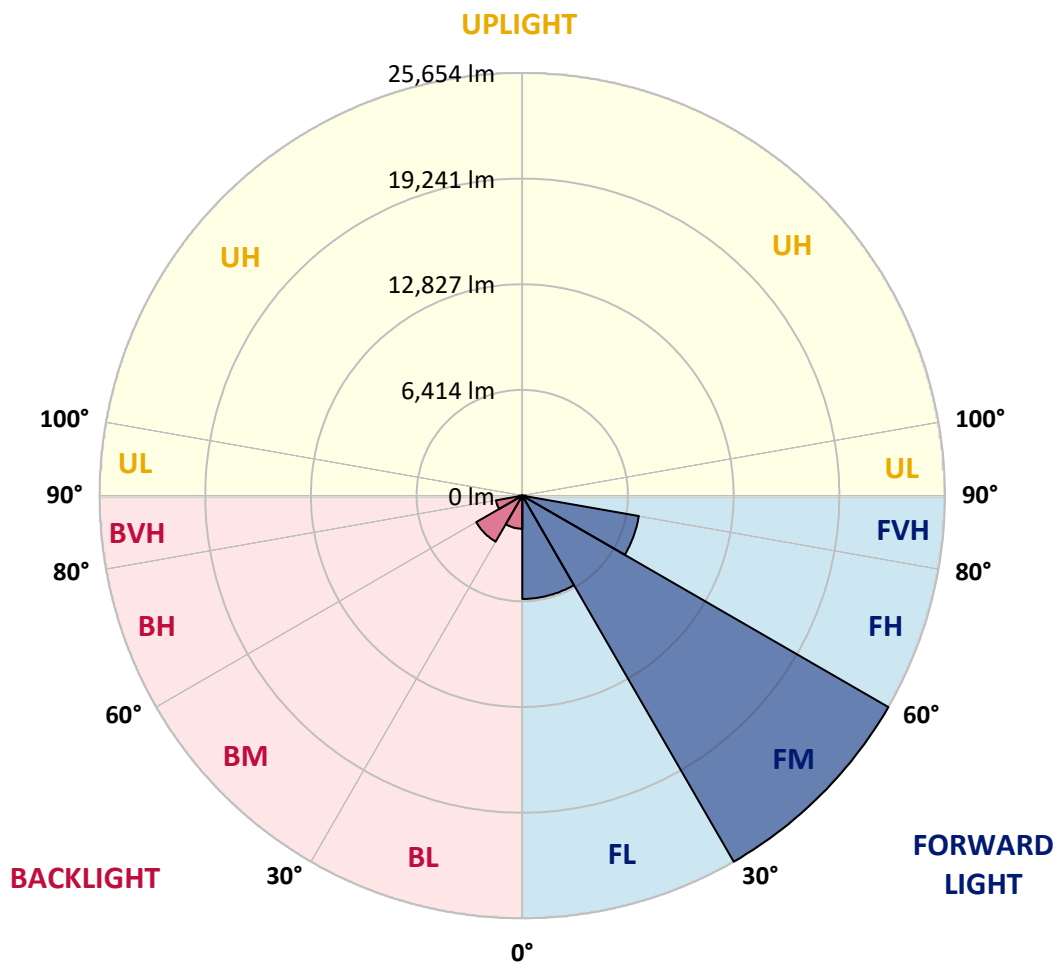
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6268.3	13.5			
FM	(30°-60°)	25654.5	55.3			
FH	(60°-80°)	7185.7	15.5			G3/7500
FVH	(80°-90°)	210.9	0.5			G2/225
BL	(0°-30°)	2009.3	4.3	B3/2500		
BM	(30°-60°)	3224.3	7.0	B3/5000		
BH	(60°-80°)	1622.6	3.5	B3/2500		G3/2500
BVH	(80°-90°)	195.5	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





REPORT NUMBER: P457531

CATALOG NUMBER: GALN-SA8D-827-U-AFL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	9742.0	9742.0	9742.0	9742.0	9742.0	9742.0	9742.0	9742.0	9742.0	9742.0	9742.0
2.5°	12105.2	11973.2	11869.1	11777.7	11658.4	11336.1	11013.7	11008.6	10752.3	10356.3	9950.2
5°	14077.4	13899.8	13922.6	13638.3	13354.0	12887.0	12204.2	12168.6	11622.9	10881.7	10127.8
7.5°	15361.8	15364.4	15293.3	15130.8	14823.7	14293.2	13519.0	13343.9	12584.9	11460.4	10330.9
10°	15295.8	15364.4	15483.7	15623.3	15717.2	15455.7	14750.1	14536.9	13549.5	12161.0	10556.8
12.5°	14417.6	14524.2	14694.3	15044.5	15610.6	16042.1	15801.0	15628.3	14666.3	12859.1	10805.6
15°	13869.3	13932.8	14026.7	14262.7	14871.9	15905.0	16529.4	16438.1	15719.7	13648.5	11084.8
17.5°	13701.8	13765.2	13795.7	13940.4	14374.4	15432.9	16816.3	16978.7	16653.8	14374.4	11366.5
20°	13869.3	13899.8	13899.8	13986.1	14326.2	15156.2	16803.6	17131.0	17420.4	15245.1	11630.5
22.5°	14308.4	14321.1	14303.4	14333.8	14587.6	15232.4	16684.3	17090.4	18039.7	15983.7	11836.1
25°	15021.7	15042.0	14925.2	14854.2	15039.5	15567.4	16750.3	17123.4	18524.6	16689.4	11973.2
27.5°	15831.4	15856.8	15714.6	15549.7	15636.0	15981.2	17009.2	17344.2	18887.5	17384.9	12059.5
30°	16823.9	16834.0	16595.4	16397.5	16341.6	16598.0	17450.9	17763.1	19339.3	18204.7	12188.9
32.5°	17839.2	17915.4	17608.2	17329.0	17235.1	17313.8	18103.2	18405.3	19877.5	19085.5	12397.1
35°	19220.0	19232.7	18864.7	18524.6	18214.9	18316.4	18938.3	19156.6	20621.2	20103.4	12691.5
37.5°	20943.6	21060.3	20552.7	19918.1	19537.3	19390.1	19948.5	20187.1	21664.4	21352.2	13135.7
40°	22857.4	22900.6	22466.5	22070.6	21375.1	20948.6	21334.5	21593.4	22951.4	22842.2	13651.0
42.5°	24060.6	24154.5	24187.5	24146.9	23624.0	22908.2	23055.4	23177.3	24474.3	24240.8	14179.0
45°	24466.7	24606.3	25078.5	26078.6	26134.4	25428.7	25086.1	25202.8	26134.4	25652.1	14684.1
47.5°	23794.1	24032.7	24903.3	26954.3	28489.9	28543.2	27510.2	27253.8	27647.2	26822.3	15049.6
50°	22055.3	22106.1	23438.7	26408.5	29594.1	31520.7	30452.1	29974.8	29083.9	27687.8	15300.9
52.5°	19364.7	19423.1	20540.0	23872.8	28913.8	33602.1	33894.0	33041.1	30543.4	28360.5	15465.9
55°	14374.4	14712.0	15940.6	19161.7	25690.2	33406.6	36630.3	36145.5	32307.6	28893.5	15724.8
57.5°	8838.4	8528.7	9985.7	13036.7	19321.6	30721.1	37475.5	37632.9	34249.4	29340.3	16158.9
60°	4066.4	4127.3	4728.9	6724.0	11777.7	24032.7	35297.7	36292.7	35323.1	29325.0	16268.0
62.5°	2802.3	2746.4	2594.1	2952.0	5371.1	15199.4	29814.9	31500.4	33170.6	28413.8	15833.9
65°	2505.3	2449.5	2155.0	2056.0	2467.2	6625.0	21674.6	23801.7	27929.0	26114.1	14752.6
67.5°	2340.3	2264.2	1959.6	1766.7	1761.6	2637.3	12780.4	15341.5	20715.1	22078.2	12782.9
70°	2167.7	2106.8	1804.7	1591.5	1500.1	1657.5	5617.3	7353.5	13450.5	15910.1	9957.8
72.5°	1995.1	1924.0	1652.4	1424.0	1304.7	1241.2	2152.5	2799.8	7599.7	9539.0	6104.6
75°	1743.8	1708.3	1477.3	1289.5	1160.0	1002.6	1365.6	1558.5	3634.9	4381.1	3063.7
77.5°	1525.5	1487.4	1312.3	1127.0	1033.1	814.8	969.6	1058.5	1533.1	1776.8	1383.4
80°	1116.9	1154.9	1106.7	995.0	921.4	639.7	652.3	726.0	911.3	1007.7	845.3
82.5°	708.2	779.3	852.9	766.6	698.0	505.1	451.8	479.7	621.9	660.0	375.7
85°	297.0	302.1	495.0	467.0	398.5	299.5	271.6	286.8	332.5	347.7	175.1
87.5°	114.2	111.7	175.1	162.5	124.4	86.3	86.3	96.5	132.0	121.8	55.8
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°	9742.0	9742.0	9742.0	9742.0	9742.0	9742.0	9742.0	9742.0	9742.0	9742.0	9742.0
2.5°	9775.0	9594.8	9236.9	8792.7	8467.8	8102.3	7779.9	7548.9	7462.6	7422.0	7345.9
5°	9767.4	9412.0	8670.9	7894.1	7269.7	6630.1	6089.4	5739.1	5708.6	5475.1	5452.3
7.5°	9769.9	9226.7	8046.4	6904.2	5952.3	5297.4	4850.7	4733.9	4594.3	4558.8	4576.6
10°	9777.6	8990.7	7376.3	5924.4	5003.0	4574.0	4406.5	4360.8	4365.9	4381.1	4383.7
12.5°	9787.7	8762.2	6680.8	5180.7	4470.0	4292.3	4274.5	4315.1	4358.3	4391.3	4398.9
15°	9800.4	8500.8	6003.1	4581.6	4203.4	4188.2	4246.6	4315.1	4376.0	4424.3	4431.9
17.5°	9785.2	8196.2	5434.5	4213.6	4056.2	4129.8	4226.3	4312.6	4368.4	4414.1	4419.2
20°	9749.6	7856.1	4886.2	3954.7	3964.8	4084.1	4188.2	4269.4	4330.3	4353.2	4371.0
22.5°	9612.6	7449.9	4409.0	3754.2	3855.7	4020.7	4145.1	4193.3	4124.7	4076.5	4089.2
25°	9379.0	6922.0	3964.8	3591.7	3756.7	3931.8	4058.8	3942.0	3886.1	3865.8	3876.0
27.5°	9087.1	6343.2	3629.8	3421.6	3629.8	3832.8	3797.3	3777.0	3751.6	3718.6	3726.2
30°	8772.4	5777.2	3345.5	3289.6	3492.7	3609.5	3624.7	3657.7	3629.8	3579.0	3599.3
32.5°	8480.5	5244.1	3129.7	3178.0	3396.3	3378.5	3492.7	3530.8	3401.3	3231.3	3238.9
35°	8231.7	4749.2	2967.3	3068.8	3231.3	3238.9	3353.1	3221.1	3081.5	3000.3	3005.4
37.5°	8043.9	4363.3	2860.7	2974.9	3020.6	3117.0	3056.1	2987.6	2969.8	2914.0	2916.5
40°	7932.2	4025.8	2792.1	2901.3	2893.7	2959.7	2764.2	2832.7	2858.1	2840.4	2842.9
42.5°	7820.5	3787.2	2721.1	2799.8	2797.2	2667.8	2624.6	2683.0	2749.0	2756.6	2751.5
45°	7731.7	3601.9	2647.5	2644.9	2695.7	2492.6	2479.9	2515.5	2609.4	2655.1	2652.5
47.5°	7632.7	3447.0	2535.8	2464.7	2479.9	2383.5	2363.2	2378.4	2492.6	2566.2	2586.5
50°	7508.3	3292.2	2396.2	2299.7	2236.2	2281.9	2287.0	2289.6	2403.8	2487.5	2505.3
52.5°	7409.3	3175.4	2236.2	2165.2	2089.0	2190.6	2228.6	2233.7	2302.2	2370.8	2383.5
55°	7467.7	3109.4	2078.9	2028.1	1959.6	2096.6	2170.3	2180.4	2195.6	2246.4	2254.0
57.5°	7642.8	3124.7	1952.0	1886.0	1835.2	1985.0	2109.3	2116.9	2106.8	2167.7	2177.9
60°	7696.1	3117.0	1858.0	1728.6	1698.1	1865.7	2020.5	2035.7	2033.2	2122.0	2139.8
62.5°	7472.8	3020.6	1764.1	1596.6	1576.3	1743.8	1896.1	1957.0	1969.7	2096.6	2119.5
65°	6947.3	2822.6	1639.7	1457.0	1457.0	1614.4	1776.8	1860.6	1896.1	2066.2	2091.6
67.5°	6254.4	2589.1	1512.8	1337.7	1332.6	1490.0	1649.9	1736.2	1792.0	2023.0	2038.3
70°	5190.8	2274.3	1355.5	1208.2	1208.2	1350.4	1495.1	1599.1	1680.4	1941.8	1941.8
72.5°	3556.2	1891.0	1165.1	1061.0	1063.5	1195.5	1342.8	1459.5	1556.0	1779.4	1784.4
75°	2248.9	1477.3	956.9	903.6	913.8	1038.2	1190.5	1312.3	1505.2	1759.0	1766.7
77.5°	1195.5	1038.2	761.5	748.8	761.5	875.7	1045.8	1213.3	1510.3	1525.5	1500.1
80°	774.2	736.1	601.6	576.2	581.3	705.6	931.6	1152.4	1213.3	1228.5	1172.7
82.5°	421.4	467.0	426.4	401.1	401.1	550.8	794.5	916.3	870.6	723.4	690.4
85°	180.2	218.3	220.8	192.9	185.3	340.1	533.0	500.0	464.5	444.2	439.1
87.5°	50.8	71.1	71.1	53.3	40.6	93.9	106.6	30.5	0.0	2.5	5.1
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)