

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: P454660

Luminaire Tested: **GALN-SA5D-740-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454660
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-SA5D-740-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39120 lumens
Efficiency: N/A
Efficacy: 126.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

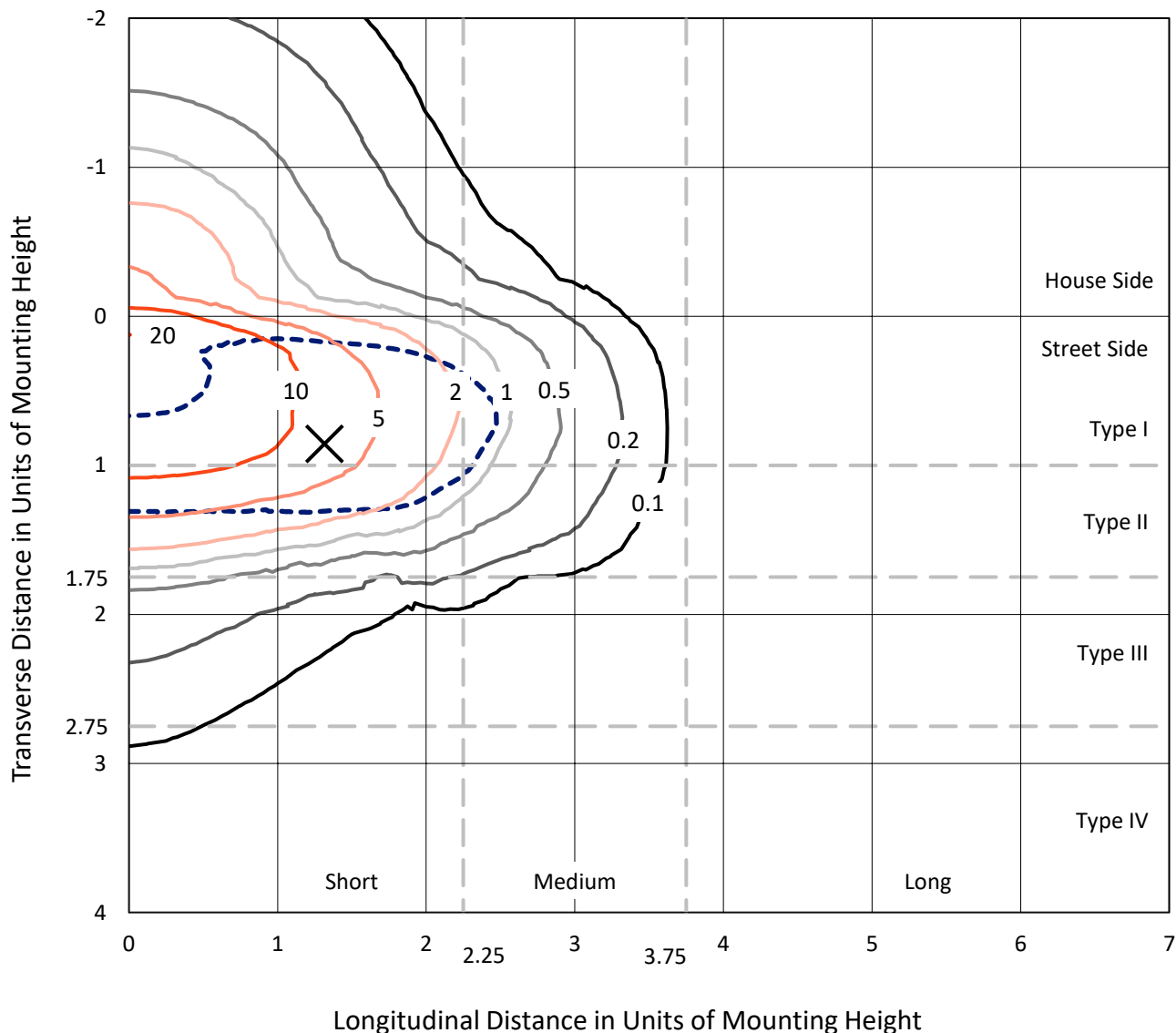
Input Watts (W): 309
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

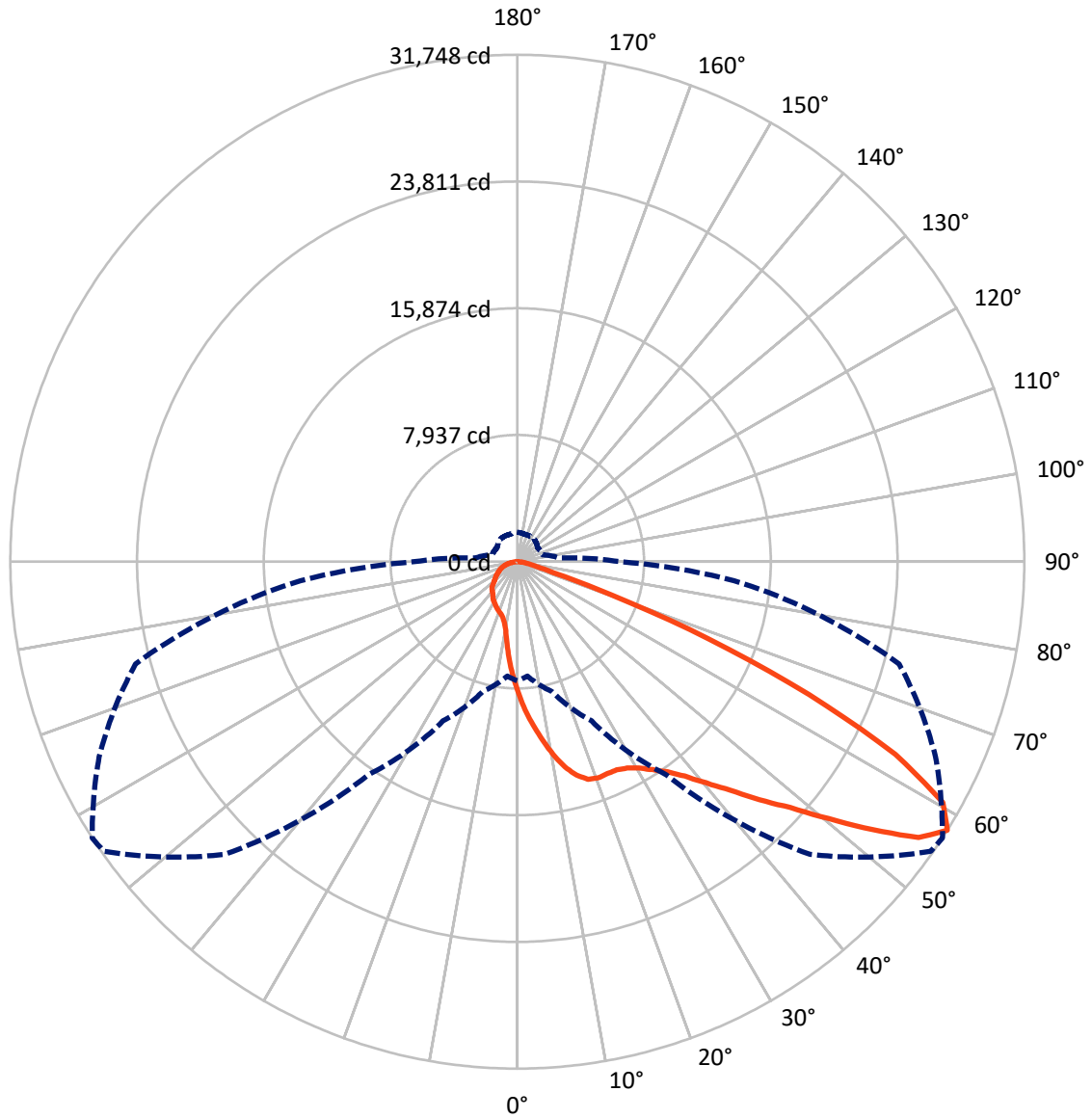
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 20 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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

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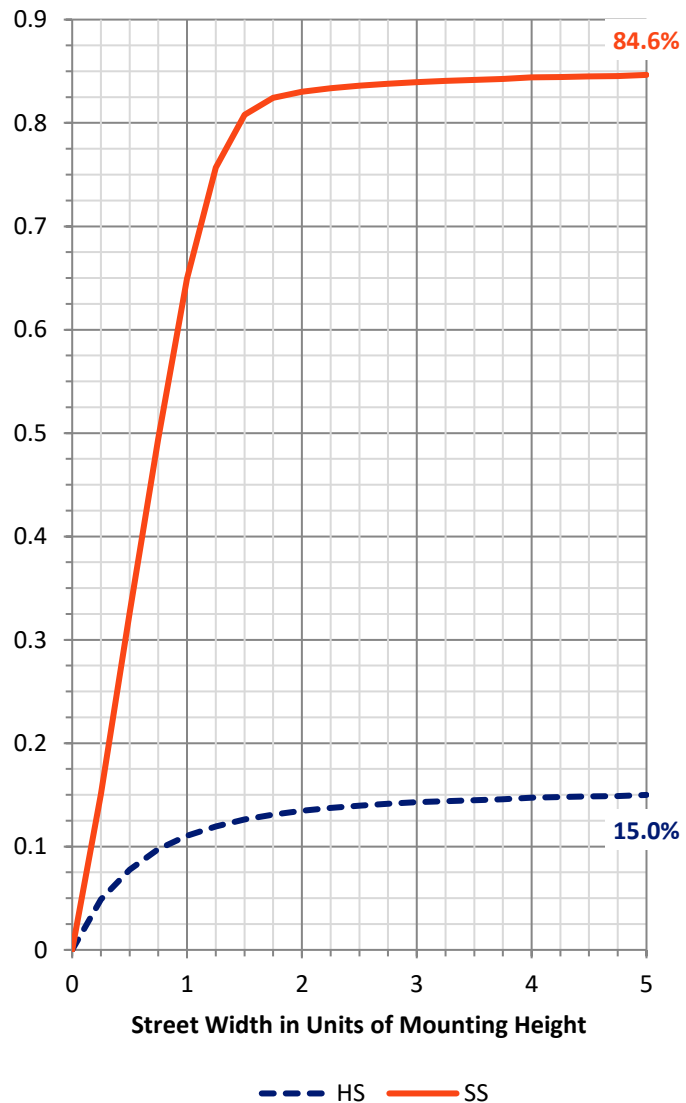
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5949.1	0.0	5949.1
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	33170.9	0.0	33170.9
	% Fixture	84.8	0.0	84.8
Total	Lumens	39120.0	0.0	39120.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	789.9	2.0
10°-20°	2327.9	6.0
20°-30°	3865.5	9.9
30°-40°	5822.5	14.9
40°-50°	8741.9	22.3
50°-60°	9798.6	25.0
60°-70°	5734.6	14.7
70°-80°	1696.3	4.3
80°-90°	342.9	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°	39120.0	100.0
0°-180°	39120.0	100.0



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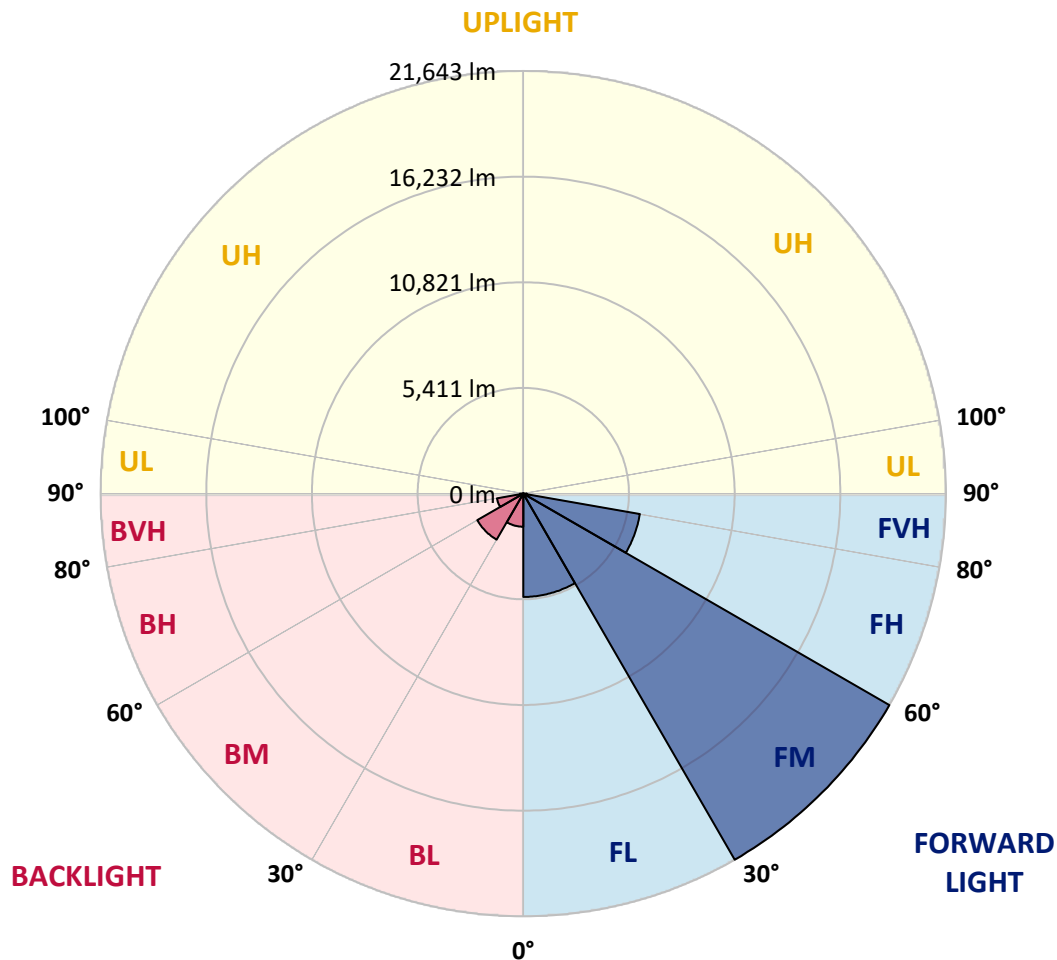
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5288.1	13.5			
FM	(30°-60°)	21642.9	55.3			
FH	(60°-80°)	6062.0	15.5			G3/7500
FVH	(80°-90°)	177.9	0.5			G2/225
BL	(0°-30°)	1695.1	4.3	B3/2500		
BM	(30°-60°)	2720.1	7.0	B3/5000		
BH	(60°-80°)	1368.8	3.5	B3/2500		G3/2500
BVH	(80°-90°)	165.0	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	8218.7	8218.7	8218.7	8218.7	8218.7	8218.7	8218.7	8218.7	8218.7	8218.7	8218.7
2.5°	10212.3	10100.9	10013.2	9936.1	9835.4	9563.5	9291.5	9287.2	9070.9	8736.9	8394.3
5°	11876.2	11726.3	11745.5	11505.7	11265.9	10871.8	10295.8	10265.8	9805.4	9180.1	8544.2
7.5°	12959.7	12961.8	12901.9	12764.8	12505.7	12058.2	11405.1	11257.3	10617.0	9668.4	8715.5
10°	12904.0	12961.8	13062.5	13180.3	13259.5	13038.9	12443.6	12263.8	11430.8	10259.4	8906.1
12.5°	12163.1	12253.0	12396.5	12692.0	13169.6	13533.6	13330.2	13184.6	12373.0	10848.3	9115.9
15°	11700.6	11754.1	11833.3	12032.5	12546.4	13418.0	13944.7	13867.7	13261.6	11514.3	9351.5
17.5°	11559.2	11612.8	11638.5	11760.5	12126.7	13019.7	14186.7	14323.8	14049.7	12126.7	9589.2
20°	11700.6	11726.3	11726.3	11799.1	12086.0	12786.3	14176.0	14452.3	14696.4	12861.2	9811.9
22.5°	12071.0	12081.7	12066.7	12092.4	12306.6	12850.5	14075.4	14418.0	15218.9	13484.3	9985.3
25°	12672.8	12689.9	12591.4	12531.4	12687.8	13133.2	14131.0	14445.8	15627.9	14079.7	10100.9
27.5°	13355.9	13377.3	13257.4	13118.2	13191.0	13482.2	14349.5	14632.1	15934.1	14666.4	10173.8
30°	14193.1	14201.7	14000.4	13833.4	13786.3	14002.6	14722.1	14985.5	16315.3	15358.1	10283.0
32.5°	15049.7	15113.9	14854.8	14619.3	14540.1	14606.4	15272.4	15527.2	16769.2	16101.1	10458.6
35°	16214.6	16225.3	15914.8	15627.9	15366.6	15452.3	15976.9	16161.1	17396.7	16959.8	10707.0
37.5°	17668.6	17767.1	17338.9	16803.5	16482.3	16358.1	16829.2	17030.5	18276.8	18013.4	11081.7
40°	19283.2	19319.6	18953.5	18619.4	18032.7	17672.9	17998.4	18216.8	19362.5	19270.4	11516.4
42.5°	20298.3	20377.5	20405.3	20371.1	19929.9	19326.1	19450.3	19553.1	20647.3	20450.3	11961.8
45°	20640.9	20758.7	21157.0	22000.7	22047.8	21452.5	21163.4	21261.9	22047.8	21640.9	12388.0
47.5°	20073.4	20274.7	21009.2	22739.4	24035.0	24080.0	23208.4	22992.1	23324.0	22628.1	12696.3
50°	18606.6	18649.4	19773.6	22279.0	24966.5	26591.8	25690.3	25287.7	24536.1	23358.3	12908.3
52.5°	16336.7	16385.9	17328.1	20139.8	24392.6	28347.8	28594.0	27874.5	25767.4	23925.8	13047.5
55°	12126.7	12411.5	13447.9	16165.4	21673.0	28182.9	30902.4	30493.4	27255.6	24375.5	13265.9
57.5°	7456.3	7195.1	8424.2	10998.2	16300.3	25917.3	31615.5	31748.3	28893.8	24752.4	13632.1
60°	3430.5	3481.9	3989.4	5672.5	9936.1	20274.7	29778.2	30617.6	29799.6	24739.5	13724.2
62.5°	2364.1	2317.0	2188.5	2490.4	4531.2	12822.7	25152.8	26574.7	27983.7	23970.7	13358.0
65°	2113.6	2066.4	1818.0	1734.5	2081.4	5589.0	18285.4	20079.8	23561.7	22030.6	12445.8
67.5°	1974.4	1910.1	1653.2	1490.4	1486.1	2224.9	10781.9	12942.6	17475.9	18625.8	10784.1
70°	1828.7	1777.4	1522.5	1342.7	1265.6	1398.3	4738.9	6203.6	11347.2	13422.2	8400.7
72.5°	1683.1	1623.2	1394.0	1201.3	1100.7	1047.1	1815.9	2362.0	6411.3	8047.4	5150.0
75°	1471.1	1441.2	1246.3	1087.8	978.6	845.9	1152.1	1314.8	3066.5	3696.0	2584.7
77.5°	1287.0	1254.9	1107.1	950.8	871.5	687.4	818.0	893.0	1293.4	1499.0	1167.1
80°	942.2	974.3	933.6	839.4	777.3	539.6	550.3	612.4	768.8	850.1	713.1
82.5°	597.4	657.4	719.5	646.7	588.9	426.1	381.2	404.7	524.6	556.8	316.9
85°	250.5	254.8	417.6	394.0	336.2	252.7	229.1	242.0	280.5	293.4	147.8
87.5°	96.4	94.2	147.8	137.0	104.9	72.8	72.8	81.4	111.4	102.8	47.1
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°	8218.7	8218.7	8218.7	8218.7	8218.7	8218.7	8218.7	8218.7	8218.7	8218.7	8218.7
2.5°	8246.5	8094.5	7792.5	7417.8	7143.7	6835.3	6563.4	6368.5	6295.7	6261.4	6197.2
5°	8240.1	7940.3	7315.0	6659.7	6132.9	5593.3	5137.2	4841.7	4816.0	4619.0	4599.7
7.5°	8242.2	7784.0	6788.2	5824.6	5021.6	4469.1	4092.2	3993.7	3875.9	3845.9	3860.9
10°	8248.6	7584.8	6222.9	4998.0	4220.7	3858.8	3717.5	3678.9	3683.2	3696.0	3698.2
12.5°	8257.2	7392.1	5636.1	4370.6	3771.0	3621.1	3606.1	3640.4	3676.8	3704.6	3711.0
15°	8267.9	7171.5	5064.4	3865.2	3546.1	3533.3	3582.5	3640.4	3691.8	3732.4	3738.9
17.5°	8255.1	6914.6	4584.7	3554.7	3421.9	3484.0	3565.4	3638.2	3685.3	3723.9	3728.2
20°	8225.1	6627.6	4122.2	3336.3	3344.9	3445.5	3533.3	3601.8	3653.2	3672.5	3687.5
22.5°	8109.5	6285.0	3719.6	3167.1	3252.8	3392.0	3496.9	3537.6	3479.8	3439.1	3449.8
25°	7912.4	5839.6	3344.9	3030.1	3169.3	3317.0	3424.1	3325.6	3278.5	3261.3	3269.9
27.5°	7666.2	5351.3	3062.2	2886.6	3062.2	3233.5	3203.5	3186.4	3165.0	3137.1	3143.6
30°	7400.7	4873.8	2822.4	2775.2	2946.6	3045.1	3057.9	3085.7	3062.2	3019.4	3036.5
32.5°	7154.4	4424.1	2640.3	2681.0	2865.2	2850.2	2946.6	2978.7	2869.5	2726.0	2732.4
35°	6944.5	4006.5	2503.3	2588.9	2726.0	2732.4	2828.8	2717.4	2599.7	2531.1	2535.4
37.5°	6786.1	3681.1	2413.3	2509.7	2548.3	2629.6	2578.2	2520.4	2505.4	2458.3	2460.5
40°	6691.9	3396.2	2355.5	2447.6	2441.2	2496.9	2332.0	2389.8	2411.2	2396.2	2398.4
42.5°	6597.6	3195.0	2295.6	2362.0	2359.8	2250.6	2214.2	2263.5	2319.1	2325.6	2321.3
45°	6522.7	3038.6	2233.5	2231.3	2274.2	2102.8	2092.1	2122.1	2201.4	2239.9	2237.8
47.5°	6439.2	2908.0	2139.3	2079.3	2092.1	2010.8	1993.6	2006.5	2102.8	2164.9	2182.1
50°	6334.2	2777.4	2021.5	1940.1	1886.6	1925.1	1929.4	1931.5	2027.9	2098.6	2113.6
52.5°	6250.7	2678.9	1886.6	1826.6	1762.4	1848.0	1880.1	1884.4	1942.2	2000.1	2010.8
55°	6300.0	2623.2	1753.8	1711.0	1653.2	1768.8	1830.9	1839.5	1852.3	1895.1	1901.6
57.5°	6447.7	2636.1	1646.7	1591.1	1548.2	1674.6	1779.5	1785.9	1777.4	1828.7	1837.3
60°	6492.7	2629.6	1567.5	1458.3	1432.6	1573.9	1704.5	1717.4	1715.3	1790.2	1805.2
62.5°	6304.3	2548.3	1488.3	1346.9	1329.8	1471.1	1599.6	1651.0	1661.7	1768.8	1788.1
65°	5861.0	2381.2	1383.3	1229.2	1229.2	1361.9	1499.0	1569.6	1599.6	1743.1	1764.5
67.5°	5276.4	2184.2	1276.3	1128.5	1124.2	1257.0	1391.9	1464.7	1511.8	1706.7	1719.5
70°	4379.1	1918.7	1143.5	1019.3	1019.3	1139.2	1261.3	1349.1	1417.6	1638.2	1638.2
72.5°	3000.1	1595.3	982.9	895.1	897.2	1008.6	1132.8	1231.3	1312.7	1501.1	1505.4
75°	1897.3	1246.3	807.3	762.3	770.9	875.8	1004.3	1107.1	1269.8	1484.0	1490.4
77.5°	1008.6	875.8	642.4	631.7	642.4	738.8	882.3	1023.6	1274.1	1287.0	1265.6
80°	653.1	621.0	507.5	486.1	490.4	595.3	785.9	972.2	1023.6	1036.4	989.3
82.5°	355.5	394.0	359.8	338.3	338.3	464.7	670.3	773.0	734.5	610.3	582.5
85°	152.0	184.2	186.3	162.7	156.3	286.9	449.7	421.9	391.9	374.7	370.5
87.5°	42.8	60.0	60.0	45.0	34.3	79.2	89.9	25.7	0.0	2.1	4.3
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)