

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: P459068

Luminaire Tested: **GALN-SA5D-735-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P459068
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-735-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36442 lumens
Efficiency: N/A
Efficacy: 117.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

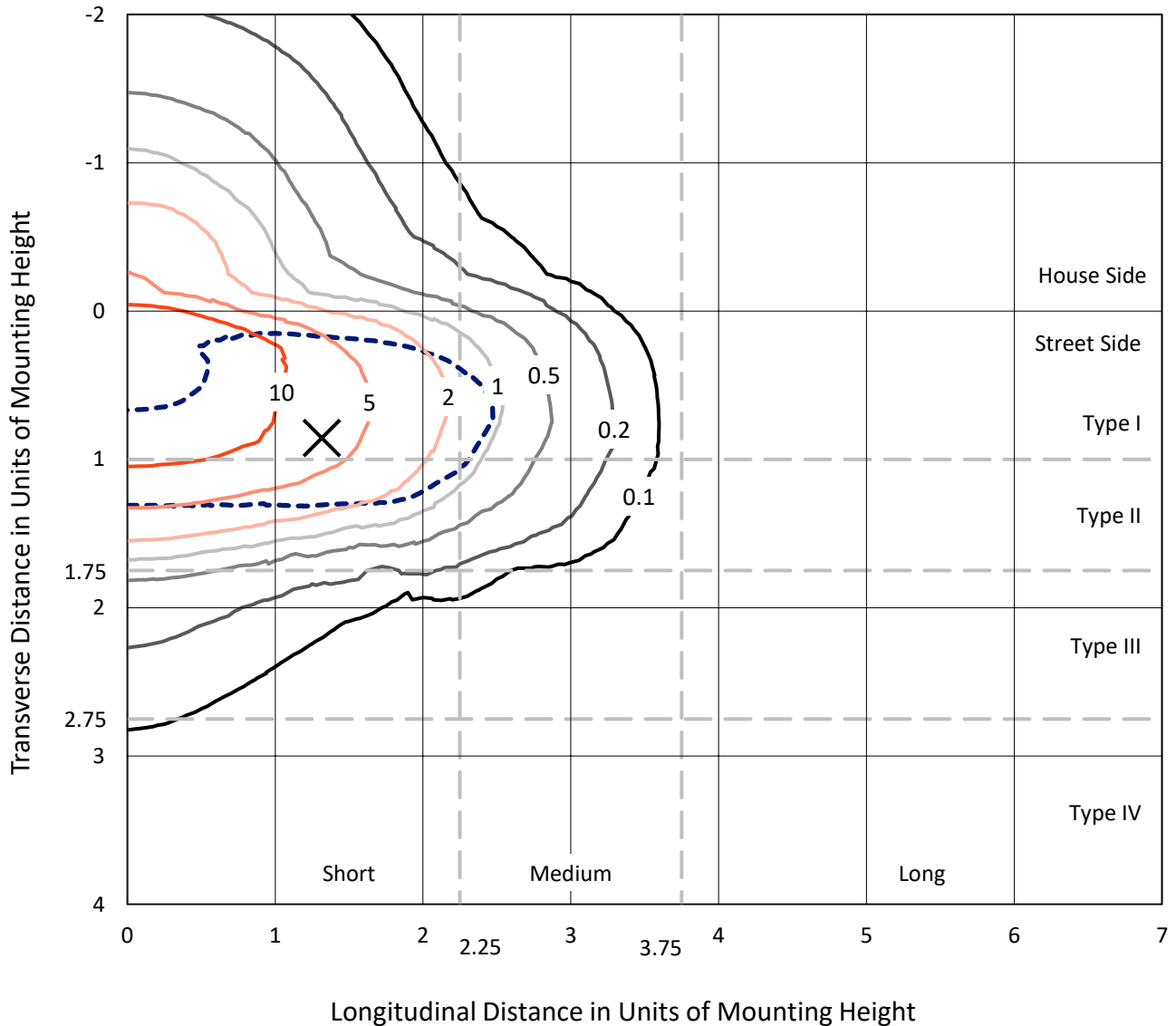
Input Watts (W): 309
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

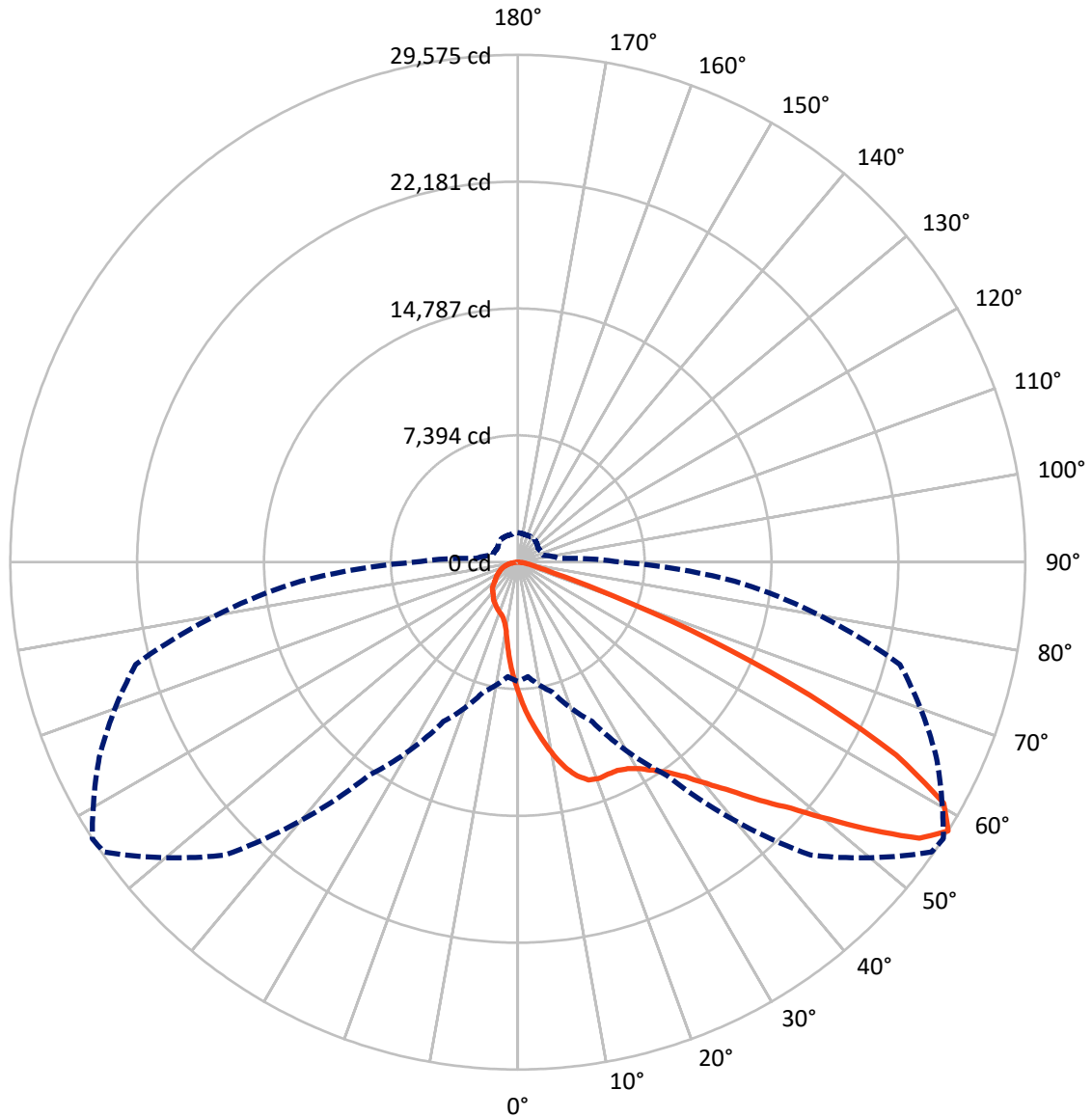
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 18.6 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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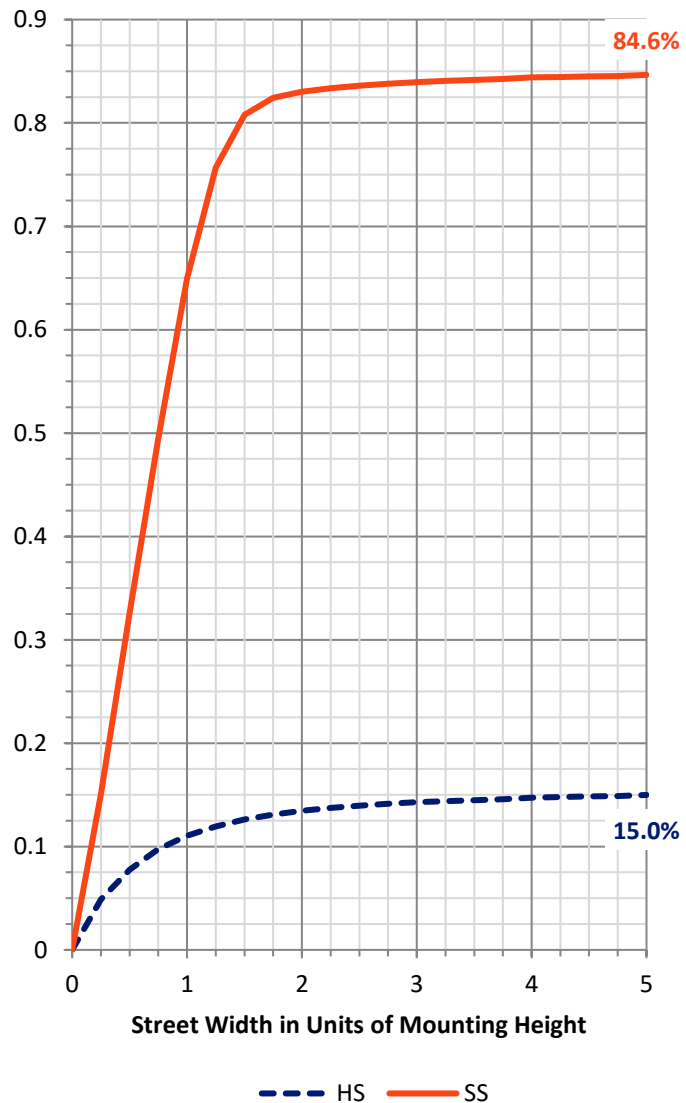
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5541.8	0.0	5541.8
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	30900.2	0.0	30900.2
	% Fixture	84.8	0.0	84.8
Total	Lumens	36442.0	0.0	36442.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	735.8	2.0
10°-20°	2168.5	6.0
20°-30°	3600.8	9.9
30°-40°	5423.9	14.9
40°-50°	8143.5	22.3
50°-60°	9127.8	25.0
60°-70°	5342.1	14.7
70°-80°	1580.1	4.3
80°-90°	319.4	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°	36442.0	100.0
0°-180°	36442.0	100.0



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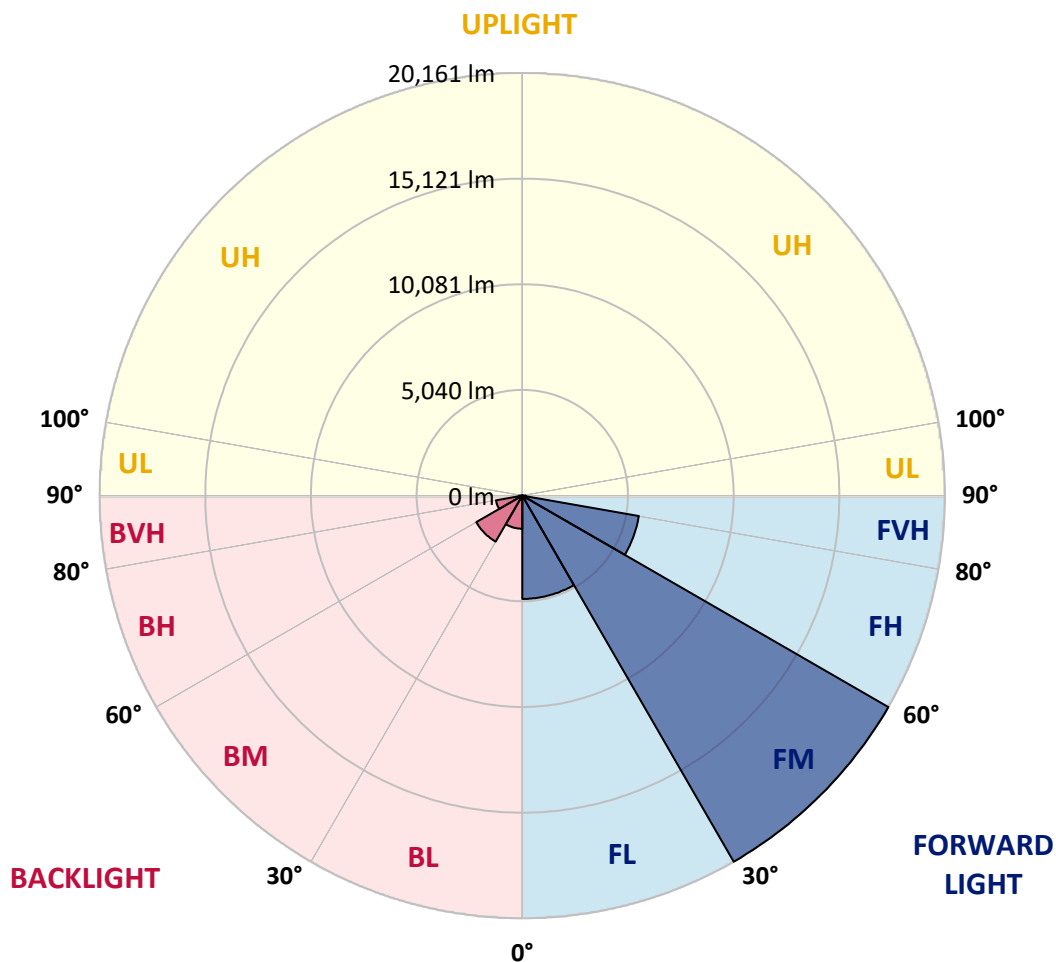
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4926.1	13.5			
FM	(30°-60°)	20161.3	55.3			
FH	(60°-80°)	5647.1	15.5			G3/7500
FVH	(80°-90°)	165.7	0.5			G2/225
BL	(0°-30°)	1579.1	4.3	B3/2500		
BM	(30°-60°)	2533.9	7.0	B3/5000		
BH	(60°-80°)	1275.1	3.5	B3/2500		G3/2500
BVH	(80°-90°)	153.7	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°	7656.0	7656.0	7656.0	7656.0	7656.0	7656.0	7656.0	7656.0	7656.0	7656.0	7656.0
2.5°	9513.2	9409.5	9327.7	9255.9	9162.1	8908.8	8655.4	8651.5	8450.0	8138.8	7819.6
5°	11063.2	10923.5	10941.5	10718.1	10494.6	10127.6	9591.0	9563.1	9134.2	8551.7	7959.3
7.5°	12072.5	12074.5	12018.7	11891.0	11649.6	11232.7	10624.3	10486.7	9890.2	9006.5	8118.8
10°	12020.7	12074.5	12168.3	12278.0	12351.8	12146.3	11591.8	11424.2	10648.2	9557.1	8296.4
12.5°	11330.5	11414.3	11547.9	11823.2	12268.0	12607.1	12417.6	12282.0	11526.0	10105.7	8491.9
15°	10899.6	10949.5	11023.3	11208.8	11687.5	12499.4	12990.1	12918.3	12353.8	10726.0	8711.3
17.5°	10767.9	10817.8	10841.7	10955.4	11296.6	12128.4	13215.6	13343.2	13087.9	11296.6	8932.7
20°	10899.6	10923.5	10923.5	10991.4	11258.7	11911.0	13205.6	13462.9	13690.3	11980.8	9140.2
22.5°	11244.7	11254.7	11240.7	11264.6	11464.1	11970.8	13111.8	13431.0	14177.1	12561.3	9301.8
25°	11805.2	11821.2	11729.4	11673.6	11819.2	12234.1	13163.7	13456.9	14558.1	13115.8	9409.5
27.5°	12441.6	12461.5	12349.8	12220.2	12288.0	12559.3	13367.2	13630.5	14843.3	13662.4	9477.3
30°	13221.5	13229.5	13042.0	12886.4	12842.5	13044.0	13714.3	13959.6	15198.4	14306.7	9579.0
32.5°	14019.5	14079.3	13837.9	13618.5	13544.7	13606.5	14226.9	14464.3	15621.3	14998.9	9742.6
35°	15104.6	15114.6	14825.4	14558.1	14314.7	14394.5	14883.2	15054.8	16205.8	15798.8	9974.0
37.5°	16459.1	16550.9	16151.9	15653.2	15354.0	15238.3	15677.1	15864.7	17025.6	16780.3	10323.1
40°	17963.2	17997.1	17656.0	17344.8	16798.2	16463.1	16766.3	16969.8	18037.0	17951.2	10728.0
42.5°	18908.7	18982.5	19008.5	18976.5	18565.6	18003.1	18118.8	18214.5	19233.9	19050.4	11143.0
45°	19227.9	19337.6	19708.6	20494.6	20538.5	19983.9	19714.6	19806.4	20538.5	20159.5	11539.9
47.5°	18699.3	18886.8	19571.0	21182.8	22389.6	22431.5	21619.7	21418.2	21727.4	21079.1	11827.2
50°	17332.8	17372.7	18420.0	20753.9	23257.4	24771.4	23931.6	23556.6	22856.4	21759.3	12024.7
52.5°	15218.3	15264.2	16141.9	18761.1	22722.8	26407.2	26636.6	25966.3	24003.4	22287.9	12154.3
55°	11296.6	11561.9	12527.4	15058.8	20189.4	26253.6	28787.0	28406.0	25389.8	22706.8	12357.8
57.5°	6945.9	6702.5	7847.5	10245.3	15184.4	24143.1	29451.2	29574.9	26915.9	23057.9	12698.9
60°	3195.7	3243.5	3716.3	5284.2	9255.9	18886.8	27739.7	28521.7	27759.7	23045.9	12784.7
62.5°	2202.3	2158.4	2038.7	2320.0	4221.0	11944.9	23430.9	24755.5	26068.1	22329.8	12443.6
65°	1968.9	1925.0	1693.6	1615.8	1938.9	5206.4	17033.6	18705.3	21948.8	20522.5	11593.8
67.5°	1839.2	1779.4	1540.0	1388.4	1384.4	2072.6	10043.8	12056.6	16279.6	17350.8	10045.8
70°	1703.6	1655.7	1418.3	1250.7	1178.9	1302.6	4414.5	5778.9	10570.5	12503.4	7825.6
72.5°	1567.9	1512.1	1298.6	1119.1	1025.3	975.5	1691.6	2200.3	5972.4	7496.5	4797.5
75°	1370.4	1342.5	1161.0	1013.4	911.6	787.9	1073.2	1224.8	2856.6	3443.0	2407.7
77.5°	1198.9	1169.0	1031.3	885.7	811.9	640.3	762.0	831.8	1204.9	1396.4	1087.2
80°	877.7	907.6	869.7	782.0	724.1	502.7	512.7	570.5	716.1	791.9	664.3
82.5°	556.5	612.4	670.3	602.4	548.6	397.0	355.1	377.0	488.7	518.6	295.2
85°	233.4	237.4	389.0	367.0	313.2	235.4	213.4	225.4	261.3	273.3	137.6
87.5°	89.8	87.8	137.6	127.7	97.7	67.8	67.8	75.8	103.7	95.8	43.9
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°	7656.0	7656.0	7656.0	7656.0	7656.0	7656.0	7656.0	7656.0	7656.0	7656.0	7656.0
2.5°	7682.0	7540.3	7259.1	6910.0	6654.7	6367.4	6114.1	5932.5	5864.7	5832.8	5773.0
5°	7676.0	7396.7	6814.2	6203.8	5713.1	5210.4	4785.5	4510.2	4486.3	4302.8	4284.8
7.5°	7678.0	7251.1	6323.5	5425.9	4677.8	4163.2	3812.1	3720.3	3610.6	3582.7	3596.6
10°	7684.0	7065.6	5796.9	4655.9	3931.8	3594.6	3463.0	3427.1	3431.1	3443.0	3445.0
12.5°	7692.0	6886.1	5250.3	4071.4	3512.8	3373.2	3359.2	3391.2	3425.1	3451.0	3457.0
15°	7701.9	6680.6	4717.7	3600.6	3303.4	3291.4	3337.3	3391.2	3439.0	3476.9	3482.9
17.5°	7690.0	6441.2	4270.9	3311.4	3187.7	3245.5	3321.3	3389.2	3433.1	3469.0	3472.9
20°	7662.0	6173.9	3840.0	3107.9	3115.9	3209.6	3291.4	3355.3	3403.1	3421.1	3435.0
22.5°	7554.3	5854.7	3465.0	2950.3	3030.1	3159.8	3257.5	3295.4	3241.6	3203.7	3213.6
25°	7370.8	5439.8	3115.9	2822.6	2952.3	3089.9	3189.7	3097.9	3054.0	3038.1	3046.1
27.5°	7141.4	4985.0	2852.6	2689.0	2852.6	3012.1	2984.2	2968.3	2948.3	2922.4	2928.4
30°	6894.0	4540.2	2629.1	2585.3	2744.8	2836.6	2848.6	2874.5	2852.6	2812.7	2828.6
32.5°	6664.6	4121.3	2459.6	2497.5	2669.0	2655.1	2744.8	2774.8	2673.0	2539.4	2545.4
35°	6469.1	3732.3	2331.9	2411.7	2539.4	2545.4	2635.1	2531.4	2421.7	2357.9	2361.8
37.5°	6321.5	3429.1	2248.1	2337.9	2373.8	2449.6	2401.7	2347.9	2333.9	2290.0	2292.0
40°	6233.8	3163.8	2194.3	2280.1	2274.1	2325.9	2172.3	2226.2	2246.1	2232.2	2234.2
42.5°	6146.0	2976.2	2138.4	2200.3	2198.3	2096.5	2062.6	2108.5	2160.4	2166.4	2162.4
45°	6076.2	2830.6	2080.6	2078.6	2118.5	1958.9	1948.9	1976.8	2050.7	2086.6	2084.6
47.5°	5998.4	2708.9	1992.8	1937.0	1948.9	1873.1	1857.2	1869.1	1958.9	2016.7	2032.7
50°	5900.6	2587.3	1883.1	1807.3	1757.4	1793.3	1797.3	1799.3	1889.1	1954.9	1968.9
52.5°	5822.8	2495.5	1757.4	1701.6	1641.7	1721.5	1751.4	1755.4	1809.3	1863.1	1873.1
55°	5868.7	2443.6	1633.7	1593.8	1540.0	1647.7	1705.6	1713.5	1725.5	1765.4	1771.4
57.5°	6006.3	2455.6	1534.0	1482.1	1442.2	1559.9	1657.7	1663.7	1655.7	1703.6	1711.5
60°	6048.2	2449.6	1460.2	1358.5	1334.5	1466.2	1587.9	1599.8	1597.8	1667.7	1681.6
62.5°	5872.7	2373.8	1386.4	1254.7	1238.8	1370.4	1490.1	1538.0	1548.0	1647.7	1665.7
65°	5459.8	2218.2	1288.6	1145.0	1145.0	1268.7	1396.4	1462.2	1490.1	1623.8	1643.7
67.5°	4915.2	2034.7	1188.9	1051.3	1047.3	1170.9	1296.6	1364.4	1408.3	1589.9	1601.8
70°	4079.4	1787.3	1065.2	949.5	949.5	1061.2	1174.9	1256.7	1320.6	1526.0	1526.0
72.5°	2794.7	1486.1	915.6	833.8	835.8	939.6	1055.2	1147.0	1222.8	1398.4	1402.3
75°	1767.4	1161.0	752.0	710.1	718.1	815.9	935.6	1031.3	1182.9	1382.4	1388.4
77.5°	939.6	815.9	598.4	588.5	598.4	688.2	821.9	953.5	1186.9	1198.9	1178.9
80°	608.4	578.5	472.8	452.8	456.8	554.6	732.1	905.6	953.5	965.5	921.6
82.5°	331.1	367.0	335.1	315.2	315.2	432.9	624.4	720.1	684.2	568.5	542.6
85°	141.6	171.6	173.5	151.6	145.6	267.3	418.9	393.0	365.0	349.1	345.1
87.5°	39.9	55.9	55.9	41.9	31.9	73.8	83.8	23.9	0.0	2.0	4.0
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)