

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: P453052

Luminaire Tested: **GALN-SA4A-740-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453052
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4A-740-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18436.9 lumens
Efficiency: N/A
Efficacy: 152.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

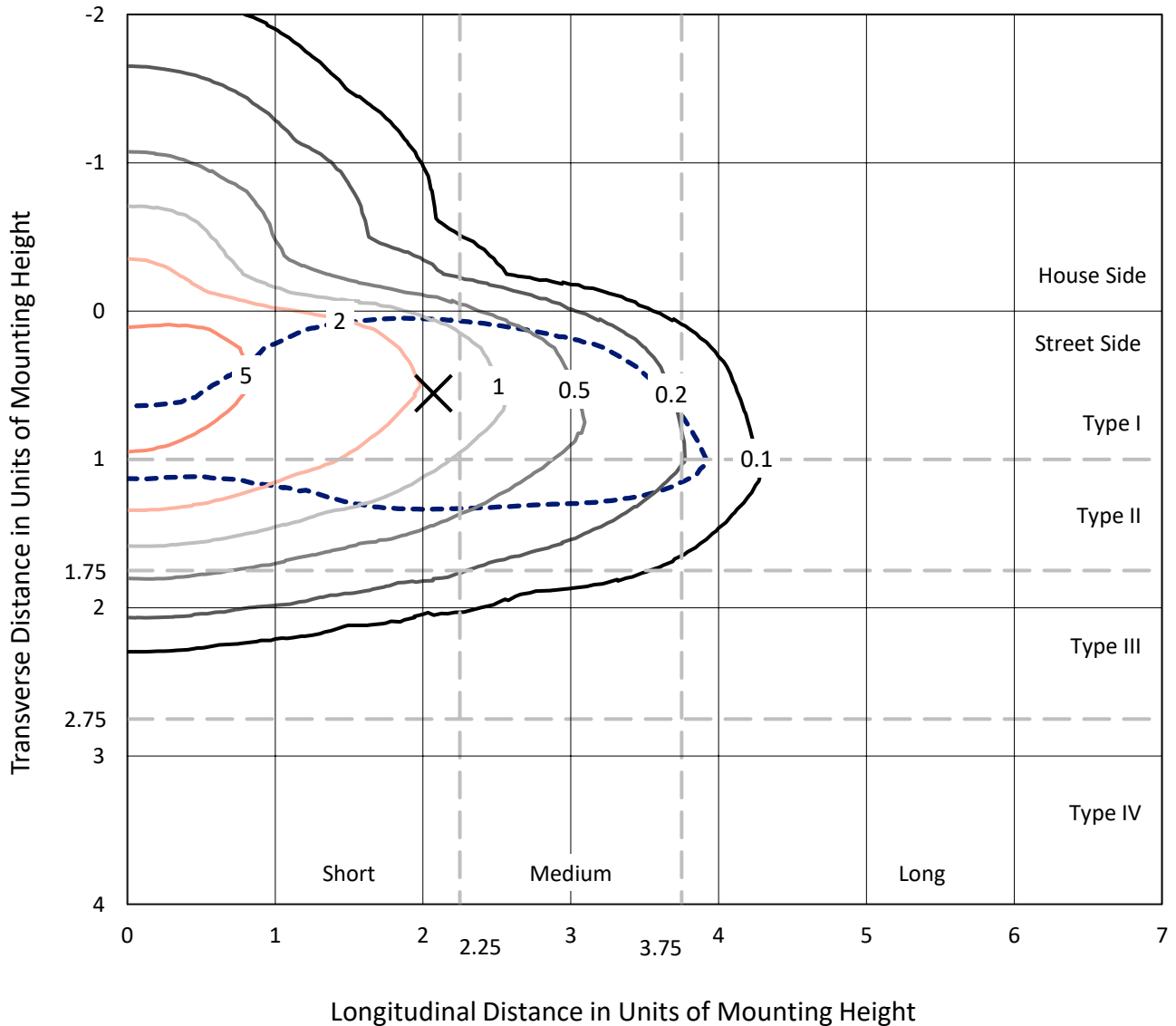
Input Watts (W): 121
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

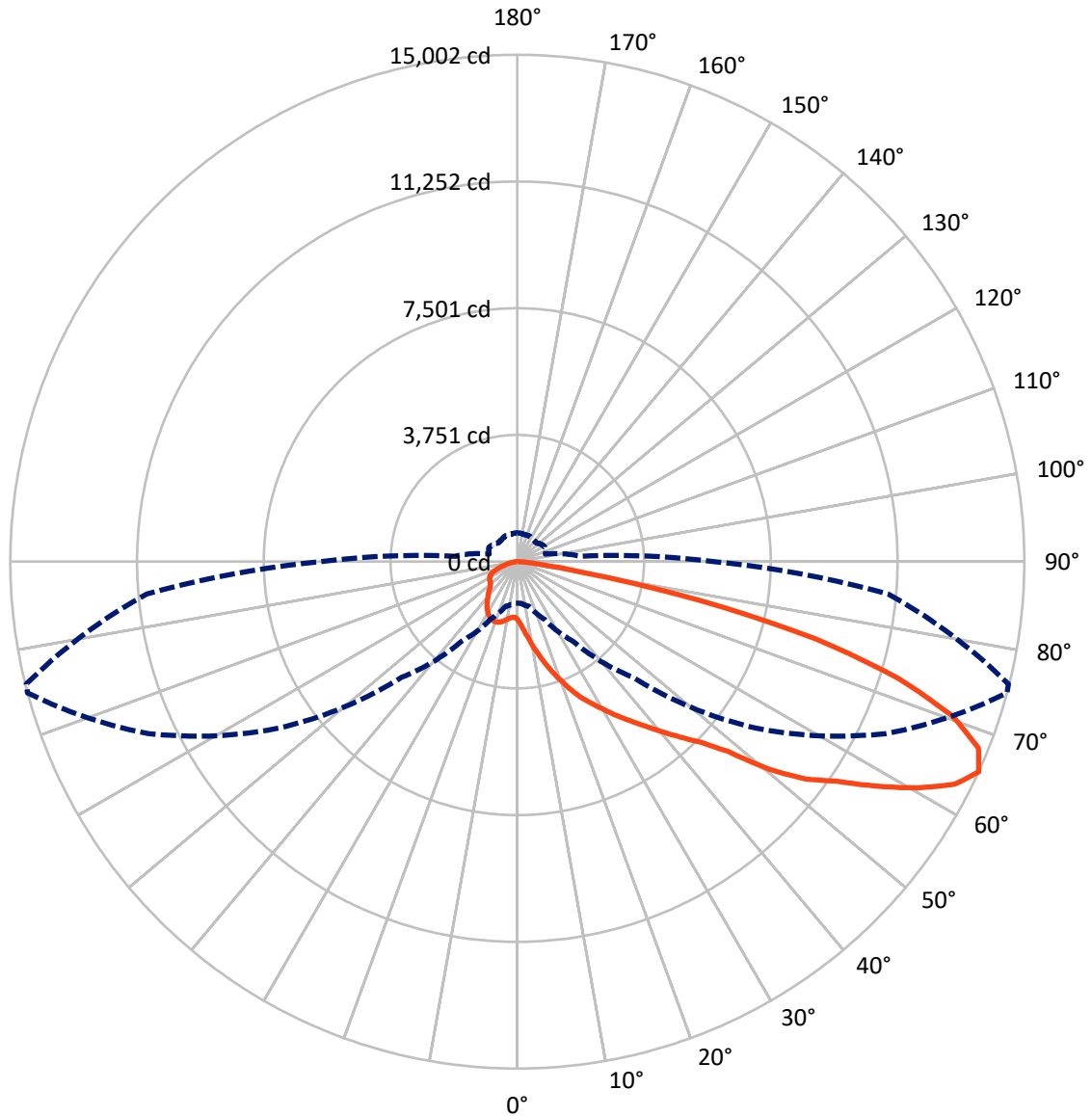
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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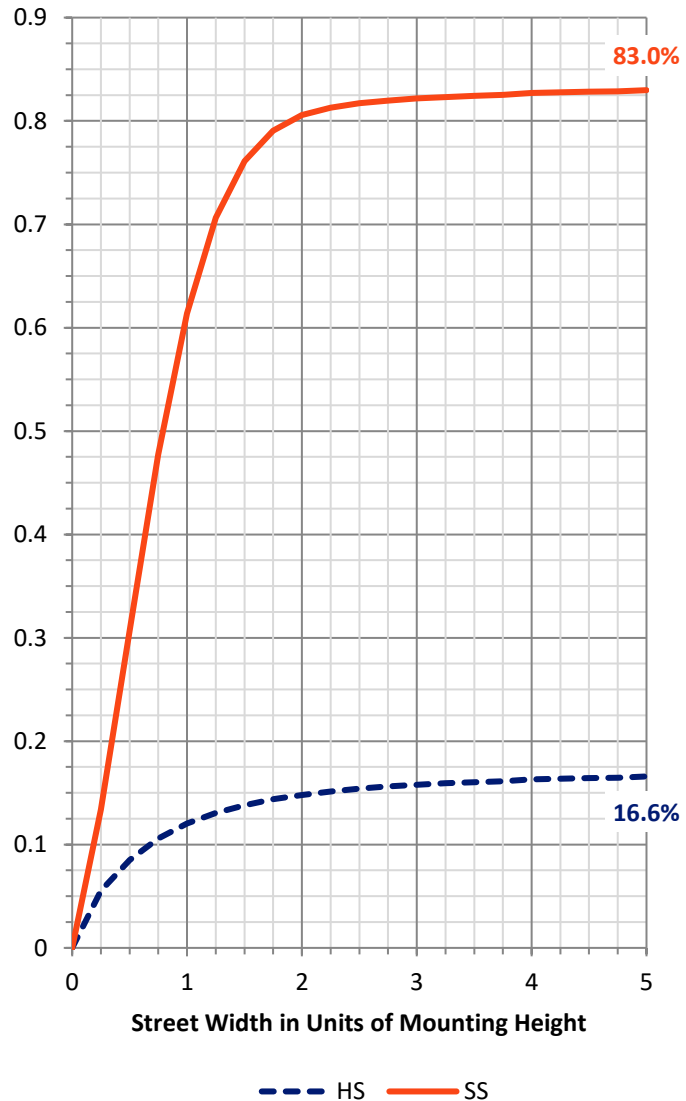
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3099.4	0.0	3099.4
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	15337.5	0.0	15337.5
	% Fixture	83.2	0.0	83.2
Total	Lumens	18436.9	0.0	18436.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.1	1.1
10°-20°	815.2	4.4
20°-30°	1574.7	8.5
30°-40°	2557.8	13.9
40°-50°	3518.5	19.1
50°-60°	4154.1	22.5
60°-70°	3639.7	19.7
70°-80°	1737.6	9.4
80°-90°	231.2	1.3
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°	18436.9	100.0
0°-180°	18436.9	100.0



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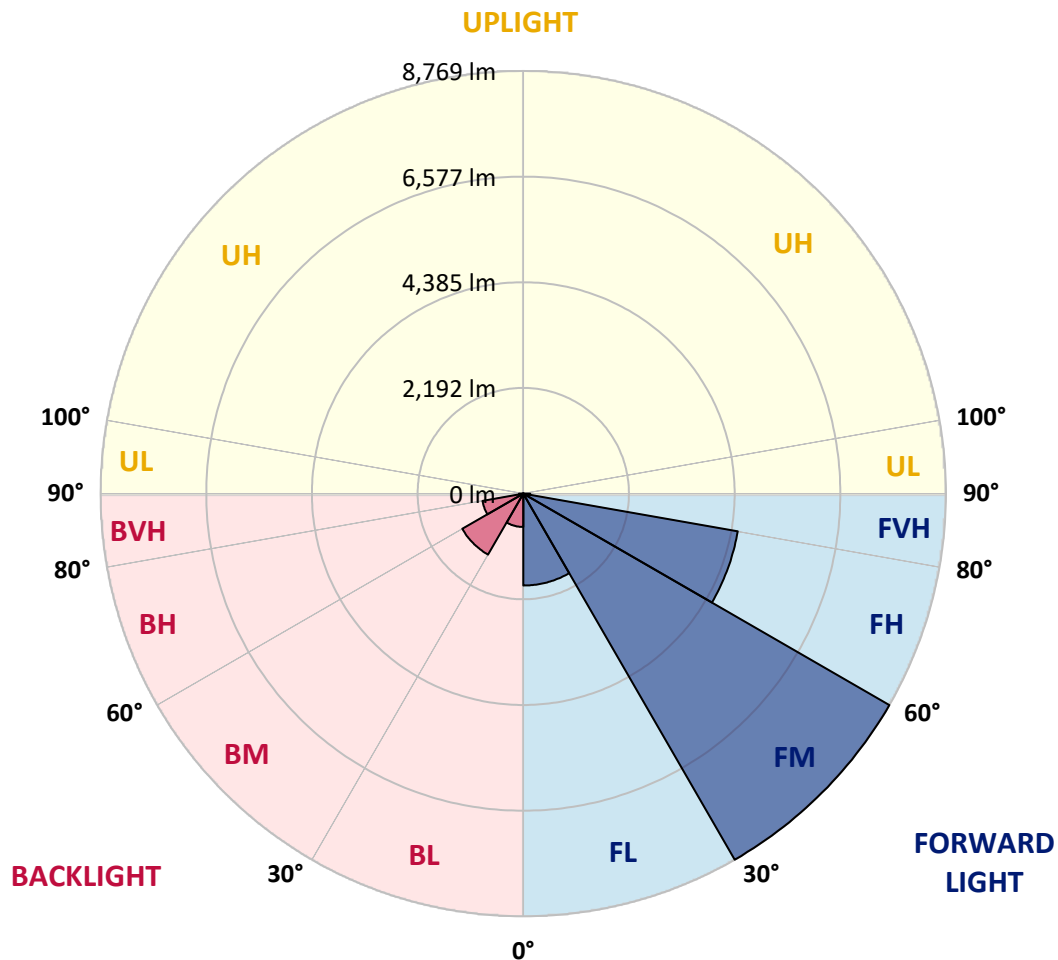
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1906.1	10.3			
FM	(30°-60°)	8769.0	47.6			
FH	(60°-80°)	4517.9	24.5			G2/5000
FVH	(80°-90°)	144.5	0.8			G2/225
BL	(0°-30°)	691.9	3.8	B2/1000		
BM	(30°-60°)	1461.4	7.9	B2/2500		
BH	(60°-80°)	859.4	4.7	B2/1000		G2/1000
BVH	(80°-90°)	86.7	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1713.0	1713.0	1713.0	1713.0	1713.0	1713.0	1713.0	1713.0	1713.0	1713.0	1713.0
2.5°	2276.0	2261.0	2245.0	2201.0	2154.0	2101.0	2025.0	1952.0	1855.0	1852.0	1780.0
5°	2907.1	2897.1	2826.0	2785.0	2676.0	2531.0	2408.0	2217.0	2040.0	2019.0	1879.0
7.5°	3487.1	3448.1	3421.1	3347.1	3239.1	3053.1	2815.0	2557.0	2261.0	2233.0	2001.0
10°	3924.1	3920.1	3906.1	3842.1	3761.1	3576.1	3312.1	2942.1	2541.0	2486.0	2149.0
12.5°	4251.1	4254.1	4252.1	4251.1	4193.1	4036.1	3750.1	3360.1	2824.0	2785.0	2320.0
15°	4466.1	4496.1	4508.1	4558.1	4563.1	4458.1	4212.1	3764.1	3143.1	3085.1	2504.0
17.5°	4608.1	4623.1	4679.1	4764.1	4833.1	4814.1	4595.1	4138.1	3469.1	3372.1	2695.0
20°	4744.1	4770.1	4813.1	4929.1	5051.1	5107.1	4953.1	4521.1	3792.1	3730.1	2906.1
22.5°	5027.1	5064.1	5079.1	5138.1	5242.1	5341.1	5271.1	4888.1	4146.1	4062.1	3130.1
25°	5506.1	5545.1	5503.1	5489.1	5523.1	5572.1	5557.1	5234.1	4480.1	4360.1	3342.1
27.5°	6130.1	6135.1	6053.1	5975.1	5891.1	5866.1	5820.1	5541.1	4770.1	4670.1	3555.1
30°	6800.1	6776.1	6640.1	6499.1	6357.1	6217.1	6085.1	5837.1	5093.1	4978.1	3764.1
32.5°	7422.1	7409.1	7258.1	7039.1	6799.1	6667.1	6400.1	6136.1	5439.1	5328.1	3979.1
35°	7888.1	7907.1	7741.1	7502.1	7240.1	7123.1	6786.1	6450.1	5797.1	5676.1	4213.1
37.5°	8219.1	8209.1	8062.1	7855.1	7625.1	7523.1	7237.1	6793.1	6182.1	6066.1	4469.1
40°	8337.1	8331.1	8222.1	8071.1	7925.1	7889.1	7709.1	7163.1	6623.1	6487.1	4777.1
42.5°	8262.1	8275.1	8203.1	8162.1	8135.1	8161.1	8178.1	7648.1	7104.1	6979.1	5111.1
45°	8032.1	8025.1	8015.1	8082.1	8234.1	8405.1	8642.2	8106.1	7627.1	7527.1	5559.1
47.5°	7621.1	7671.1	7696.1	7881.1	8213.1	8618.2	9176.2	8720.2	8386.1	8299.1	6242.1
50°	7046.1	7086.1	7234.1	7563.1	8058.1	8698.2	9698.2	9724.2	9652.2	9489.2	6984.1
52.5°	6148.1	6210.1	6515.1	7118.1	7740.1	8665.2	10014.2	10585.2	10680.2	10558.2	7715.1
55°	5143.1	5230.1	5552.1	6343.1	7302.1	8485.1	10232.2	11084.2	11463.2	11350.2	8419.1
57.5°	4159.1	4251.1	4582.1	5348.1	6538.1	8087.1	10375.2	11640.2	12529.2	12382.2	9295.2
60°	3117.1	3213.1	3497.1	4286.1	5450.1	7309.1	10278.2	12122.2	13594.2	13531.2	10172.2
62.5°	2011.0	2117.0	2364.0	3017.1	4189.1	6246.1	9759.2	12388.2	14516.3	14440.3	10812.2
65°	1225.0	1237.0	1373.0	1873.0	2867.1	4836.1	8572.2	12035.2	15002.3	14979.3	11007.2
67.5°	792.0	811.0	873.0	1122.0	1719.0	3359.1	6854.1	10870.2	14718.3	14710.3	10604.2
70°	669.0	675.0	703.0	757.0	999.0	2037.0	4813.1	9013.2	13639.2	13639.2	9635.2
72.5°	598.0	606.0	616.0	633.0	713.0	1154.0	2872.1	7016.1	11776.2	11854.2	8201.1
75°	543.0	541.0	547.0	550.0	608.0	754.0	1485.0	5189.1	9110.2	8954.2	5939.1
77.5°	465.0	468.0	465.0	478.0	537.0	574.0	754.0	3482.1	5521.1	5319.1	2981.1
80°	382.0	387.0	392.0	400.0	459.0	436.0	453.0	1587.0	2042.0	1999.0	921.0
82.5°	287.0	294.0	302.0	321.0	361.0	288.0	286.0	678.0	737.0	675.0	339.0
85°	116.0	137.0	207.0	226.0	227.0	158.0	176.0	283.0	301.0	294.0	133.0
87.5°	27.0	32.0	67.0	101.0	93.0	59.0	65.0	92.0	105.0	97.0	45.0
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°	1713.0	1713.0	1713.0	1713.0	1713.0	1713.0	1713.0	1713.0	1713.0	1713.0	1713.0
2.5°	1747.0	1712.0	1652.0	1606.0	1573.0	1544.0	1526.0	1515.0	1511.0	1510.0	1511.0
5°	1806.0	1744.0	1649.0	1589.0	1556.0	1537.0	1526.0	1525.0	1526.0	1527.0	1524.0
7.5°	1887.0	1798.0	1674.0	1618.0	1593.0	1579.0	1574.0	1572.0	1573.0	1572.0	1572.0
10°	1995.0	1873.0	1723.0	1665.0	1644.0	1628.0	1620.0	1615.0	1611.0	1607.0	1605.0
12.5°	2114.0	1956.0	1776.0	1720.0	1690.0	1665.0	1647.0	1634.0	1625.0	1616.0	1614.0
15°	2247.0	2044.0	1835.0	1757.0	1714.0	1677.0	1646.0	1625.0	1609.0	1596.0	1595.0
17.5°	2374.0	2127.0	1875.0	1774.0	1711.0	1659.0	1618.0	1589.0	1569.0	1552.0	1550.0
20°	2510.0	2206.0	1893.0	1763.0	1681.0	1618.0	1564.0	1529.0	1506.0	1487.0	1484.0
22.5°	2647.0	2273.0	1891.0	1728.0	1629.0	1555.0	1498.0	1461.0	1434.0	1415.0	1408.0
25°	2778.0	2327.0	1866.0	1672.0	1557.0	1480.0	1422.0	1388.0	1364.0	1341.0	1341.0
27.5°	2896.1	2359.0	1819.0	1604.0	1483.0	1402.0	1356.0	1325.0	1303.0	1288.0	1279.0
30°	3012.1	2374.0	1755.0	1518.0	1405.0	1336.0	1299.0	1281.0	1261.0	1244.0	1242.0
32.5°	3116.1	2371.0	1675.0	1434.0	1331.0	1282.0	1267.0	1253.0	1232.0	1208.0	1202.0
35°	3217.1	2351.0	1580.0	1342.0	1269.0	1250.0	1254.0	1234.0	1196.0	1166.0	1161.0
37.5°	3327.1	2315.0	1476.0	1267.0	1217.0	1235.0	1245.0	1201.0	1139.0	1092.0	1081.0
40°	3454.1	2274.0	1368.0	1192.0	1176.0	1221.0	1221.0	1140.0	1055.0	1026.0	1018.0
42.5°	3603.1	2240.0	1278.0	1129.0	1142.0	1187.0	1182.0	1059.0	1024.0	1009.0	1005.0
45°	3839.1	2228.0	1185.0	1074.0	1114.0	1147.0	1106.0	1031.0	1011.0	999.0	995.0
47.5°	4212.1	2242.0	1103.0	1033.0	1082.0	1107.0	1021.0	1012.0	998.0	981.0	979.0
50°	4558.1	2229.0	1045.0	1010.0	1054.0	1059.0	986.0	989.0	981.0	962.0	958.0
52.5°	4841.1	2188.0	1008.0	998.0	1030.0	975.0	953.0	964.0	961.0	937.0	933.0
55°	5152.1	2163.0	990.0	998.0	1014.0	902.0	922.0	938.0	934.0	917.0	916.0
57.5°	5529.1	2168.0	977.0	1001.0	998.0	865.0	891.0	910.0	909.0	904.0	904.0
60°	5915.1	2170.0	957.0	1000.0	979.0	836.0	859.0	886.0	888.0	891.0	891.0
62.5°	6043.1	2083.0	918.0	982.0	937.0	808.0	829.0	866.0	864.0	872.0	873.0
65°	5804.1	1842.0	860.0	941.0	883.0	788.0	806.0	840.0	829.0	850.0	854.0
67.5°	5283.1	1524.0	770.0	867.0	823.0	767.0	791.0	804.0	784.0	825.0	826.0
70°	4566.1	1190.0	656.0	762.0	755.0	745.0	779.0	759.0	731.0	781.0	771.0
72.5°	3818.1	909.0	524.0	623.0	664.0	712.0	758.0	701.0	662.0	677.0	659.0
75°	2868.1	672.0	421.0	488.0	553.0	665.0	739.0	631.0	571.0	557.0	553.0
77.5°	1462.0	439.0	315.0	365.0	415.0	601.0	713.0	549.0	473.0	451.0	441.0
80°	522.0	273.0	222.0	252.0	280.0	517.0	623.0	454.0	367.0	363.0	367.0
82.5°	242.0	176.0	149.0	165.0	166.0	345.0	475.0	339.0	279.0	424.0	358.0
85°	104.0	88.0	84.0	82.0	76.0	154.0	267.0	182.0	284.0	127.0	117.0
87.5°	31.0	35.0	31.0	23.0	17.0	17.0	27.0	10.0	7.0	5.0	5.0
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)