

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: P453166

Luminaire Tested: **GALN-SA4A-830-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453166
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-SA4A-830-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14458 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 121
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

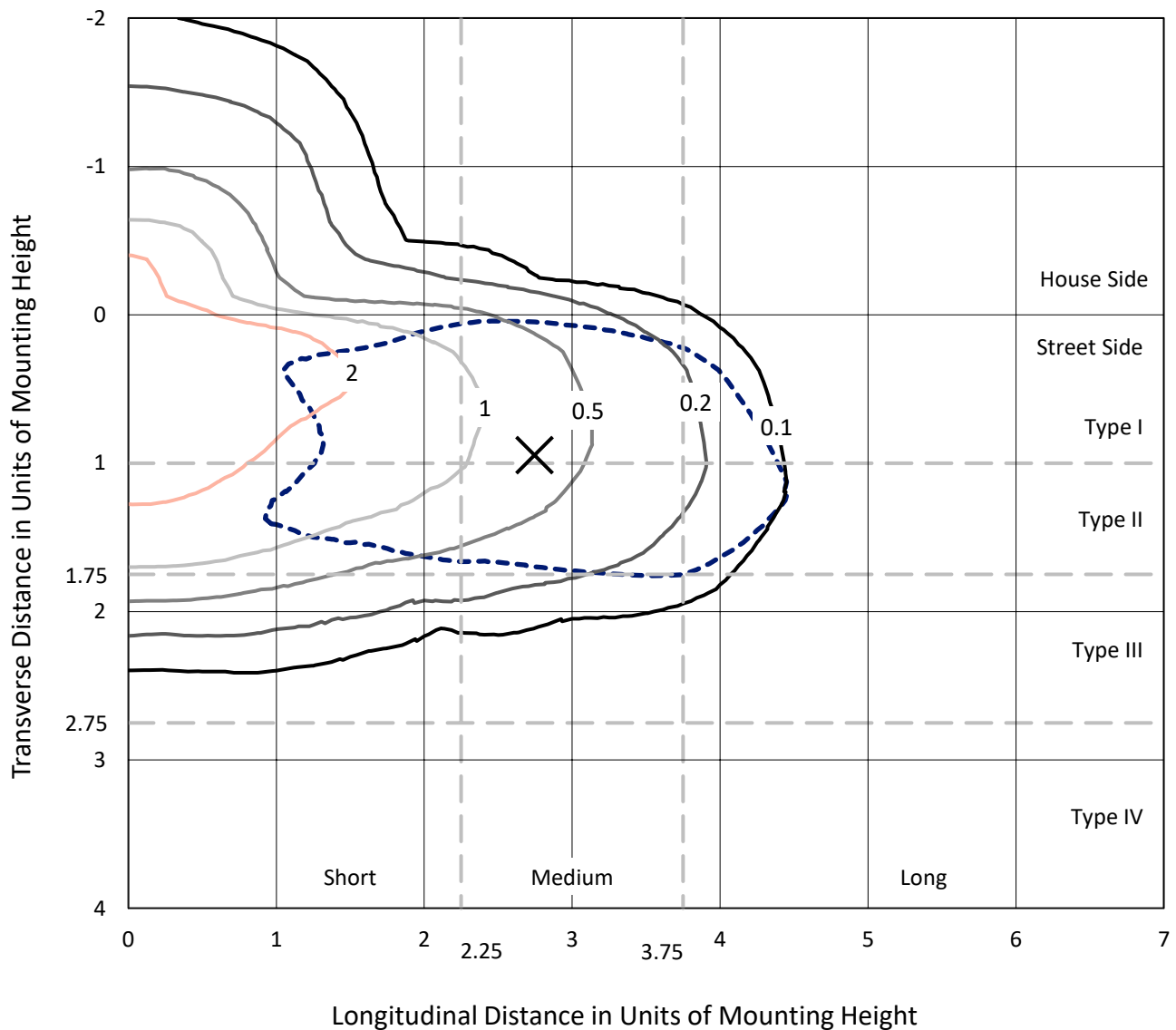


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

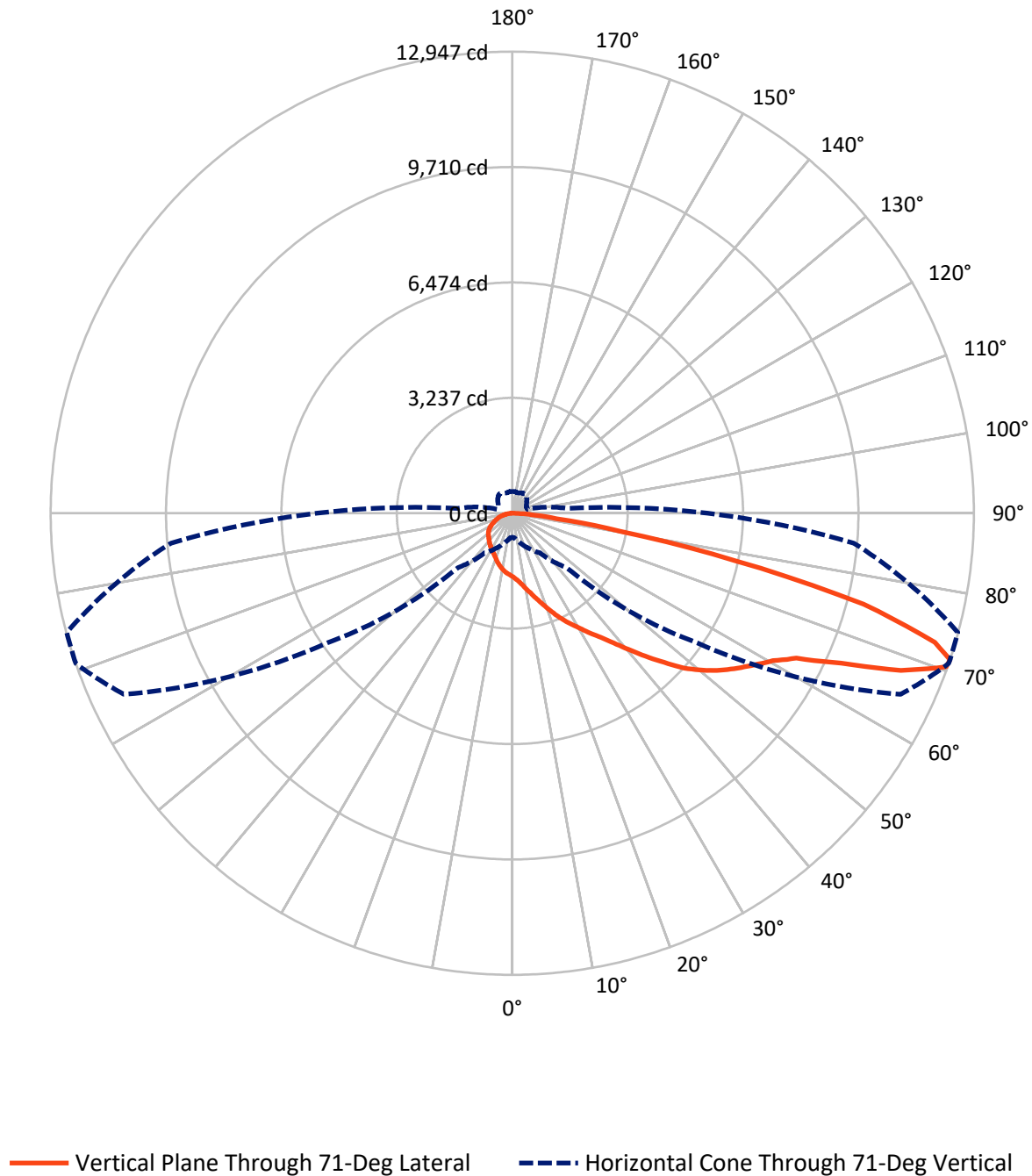


Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2600.2	0.0	2600.2
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	11857.8	0.0	11857.8
	% Fixture	82.0	0.0	82.0
Total	Lumens	14458.0	0.0	14458.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.2	1.2
10°-20°	578.8	4.0
20°-30°	1011.6	7.0
30°-40°	1504.6	10.4
40°-50°	2216.8	15.3
50°-60°	3103.6	21.5
60°-70°	3471.3	24.0
70°-80°	2120.4	14.7
80°-90°	272.8	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°	14458.0	100.0
0°-180°	14458.0	100.0

Coefficient of Utilization



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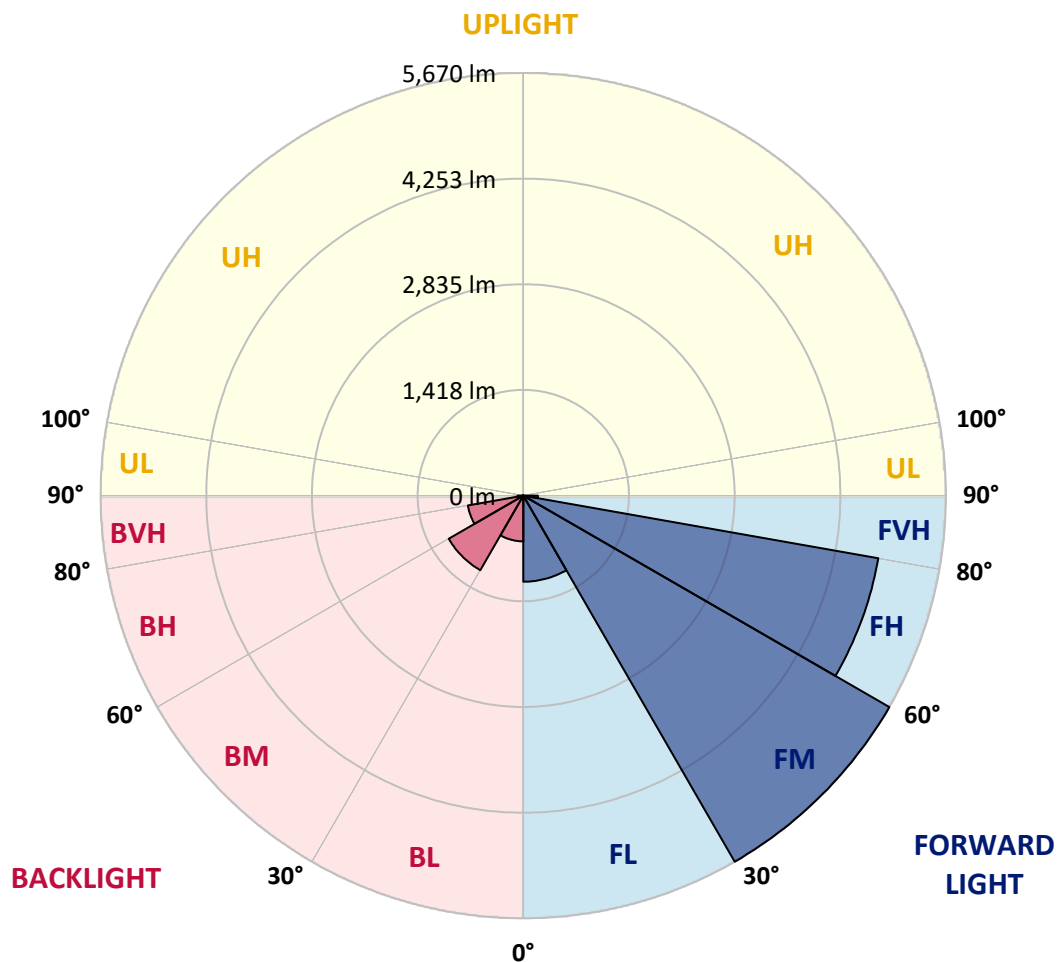
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1155.2	8.0			
FM	(30°-60°)	5670.1	39.2			
FH	(60°-80°)	4836.2	33.4			G2/5000
FVH	(80°-90°)	196.3	1.4			G2/225
BL	(0°-30°)	613.4	4.2	B2/1000		
BM	(30°-60°)	1154.9	8.0	B2/2500		
BH	(60°-80°)	755.5	5.2	B2/1000		G2/1000
BVH	(80°-90°)	76.5	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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	1774.4	1774.4	1774.4	1774.4	1774.4	1774.4	1774.4	1774.4	1774.4	1774.4	1774.4
2.5°	1969.9	1960.4	1961.2	1947.7	1930.2	1911.1	1884.1	1860.3	1841.2	1830.1	1797.5
5°	2182.9	2173.3	2161.4	2132.0	2119.3	2072.4	2012.8	1958.8	1917.5	1894.4	1829.3
7.5°	2355.3	2352.9	2349.8	2333.1	2300.5	2235.3	2184.5	2090.7	2029.5	1985.8	1874.6
10°	2461.8	2465.8	2468.2	2471.3	2457.8	2423.7	2353.7	2235.3	2157.5	2101.8	1933.4
12.5°	2515.8	2519.8	2533.3	2562.7	2581.0	2577.0	2519.8	2403.8	2296.5	2223.4	1996.1
15°	2549.2	2555.6	2579.4	2618.3	2679.5	2718.5	2690.7	2583.4	2465.8	2379.2	2070.8
17.5°	2585.8	2592.9	2619.1	2674.8	2755.0	2839.3	2869.5	2777.3	2649.3	2546.0	2154.3
20°	2606.4	2616.0	2653.3	2726.4	2820.2	2942.6	3042.7	2994.2	2854.4	2739.9	2250.4
22.5°	2639.8	2647.7	2679.5	2757.4	2869.5	3022.8	3215.9	3205.6	3082.4	2934.6	2356.1
25°	2730.4	2743.1	2759.0	2805.9	2914.0	3104.7	3359.7	3431.3	3303.3	3138.0	2453.1
27.5°	2901.2	2911.6	2910.8	2917.1	2978.3	3175.4	3484.5	3654.6	3522.6	3343.9	2546.8
30°	3095.9	3099.9	3103.1	3088.8	3102.3	3247.7	3598.9	3875.5	3743.6	3555.2	2628.7
32.5°	3332.7	3340.7	3313.7	3277.1	3266.0	3355.0	3693.5	4096.4	4005.0	3769.8	2709.7
35°	3612.4	3633.1	3578.3	3513.9	3468.6	3509.1	3820.6	4322.1	4272.8	4043.9	2817.0
37.5°	3931.9	3957.3	3906.5	3780.1	3715.7	3726.9	3986.7	4601.0	4611.3	4356.2	2976.7
40°	4193.3	4226.7	4228.3	4049.5	3951.8	3964.5	4197.3	4901.3	5019.7	4742.4	3165.1
42.5°	4365.8	4398.3	4432.5	4327.6	4225.1	4297.4	4442.8	5227.2	5479.1	5211.3	3428.1
45°	4554.9	4584.3	4603.4	4555.7	4498.5	4686.0	4739.2	5573.6	5968.6	5734.9	3715.7
47.5°	4774.2	4806.8	4825.1	4779.8	4758.3	5026.9	5058.7	5897.0	6491.4	6243.5	4033.6
50°	5066.6	5091.3	5081.7	5053.1	5048.4	5288.3	5365.4	6199.8	6922.9	6791.0	4363.4
52.5°	5430.6	5460.0	5470.3	5429.8	5411.5	5475.1	5612.6	6475.5	7315.5	7261.4	4715.4
55°	5650.7	5697.6	5854.9	5918.5	5962.2	5716.7	5878.8	6779.9	7667.5	7757.3	5093.7
57.5°	5368.6	5429.0	5781.0	6098.9	6509.7	6320.6	6256.2	7097.7	8019.5	8238.0	5546.6
60°	4680.4	4693.9	5147.7	5733.3	6559.8	7096.9	7043.7	7603.1	8400.9	8722.8	6143.4
62.5°	3246.9	3275.5	3811.9	4746.4	5941.5	7376.7	8383.5	8475.6	8947.7	9448.3	7018.3
65°	1674.3	1637.0	2125.7	2983.1	4479.4	6712.3	9468.9	10080.0	10133.3	10583.0	8250.0
67.5°	1030.6	1047.3	1276.2	1741.9	2648.5	4878.3	9355.3	12040.4	11759.9	11976.0	9393.5
70°	774.0	794.6	952.0	1192.0	1614.7	2789.2	7523.7	12515.6	12907.4	12851.7	9741.5
71°	673.1	694.5	858.2	1084.7	1356.5	2152.7	6338.9	12018.2	12947.1	12937.6	9610.4
72.5°	573.7	587.2	715.2	918.6	1143.5	1509.0	4762.3	10778.5	12394.8	12711.9	9142.3
75°	450.6	460.9	518.1	700.9	900.3	926.6	2555.6	8080.7	10180.2	10784.1	7611.1
77.5°	367.1	374.3	403.7	520.5	694.5	656.4	1340.6	5259.7	6377.8	6985.7	4483.4
80°	291.6	299.6	317.1	352.8	520.5	468.0	639.7	2665.2	3080.8	3074.5	1789.5
82.5°	226.5	228.9	249.5	259.1	356.0	332.2	346.5	1128.4	1250.0	1291.3	646.0
85°	143.0	150.2	220.9	198.7	213.0	194.7	170.8	448.2	552.3	544.3	258.3
87.5°	43.7	46.1	74.7	84.2	94.6	85.0	62.8	131.9	161.3	174.8	64.4
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°	1774.4	1774.4	1774.4	1774.4	1774.4	1774.4	1774.4	1774.4	1774.4	1774.4	1774.4
2.5°	1784.8	1776.0	1745.0	1719.6	1695.8	1669.5	1647.3	1640.9	1635.4	1633.0	1632.2
5°	1801.5	1775.2	1714.0	1664.0	1624.2	1587.7	1564.6	1554.3	1544.0	1544.0	1547.2
7.5°	1825.3	1777.6	1683.1	1608.4	1558.3	1524.1	1507.4	1505.8	1508.2	1510.6	1511.4
10°	1851.5	1776.0	1637.8	1544.8	1500.3	1484.4	1485.2	1498.7	1511.4	1520.9	1522.5
12.5°	1876.9	1766.5	1584.5	1485.2	1456.6	1459.8	1482.0	1512.2	1536.8	1550.3	1551.1
15°	1905.6	1751.4	1520.1	1428.8	1419.2	1443.9	1485.2	1531.3	1568.6	1590.9	1593.3
17.5°	1929.4	1726.0	1452.6	1373.9	1385.9	1431.1	1488.4	1548.0	1593.3	1621.1	1625.8
20°	1956.4	1693.4	1382.7	1321.5	1355.7	1416.8	1482.0	1546.4	1593.3	1620.3	1626.6
22.5°	1977.9	1647.3	1315.9	1278.6	1328.6	1399.4	1460.6	1512.2	1550.3	1564.6	1574.2
25°	1986.6	1589.3	1253.1	1243.6	1307.2	1370.8	1412.1	1441.5	1453.4	1451.8	1455.8
27.5°	1981.8	1522.5	1199.1	1215.8	1280.2	1326.3	1346.9	1344.5	1323.1	1303.2	1312.7
30°	1962.0	1443.1	1153.8	1187.2	1245.2	1270.6	1267.5	1236.5	1195.9	1158.6	1161.0
32.5°	1926.2	1357.2	1111.7	1154.6	1195.9	1207.1	1185.6	1145.1	1087.1	1038.6	1031.4
35°	1896.0	1275.4	1074.4	1117.3	1146.7	1141.1	1120.4	1068.0	1015.6	972.6	965.5
37.5°	1891.2	1205.5	1038.6	1075.1	1091.8	1083.9	1058.5	1014.0	994.9	962.3	958.3
40°	1916.7	1156.2	1002.0	1030.6	1038.6	1032.2	1004.4	979.0	996.5	988.5	988.5
42.5°	1985.8	1130.0	969.5	986.2	992.5	997.3	977.4	956.0	977.4	940.9	928.9
45°	2095.5	1130.8	940.1	942.4	961.5	978.2	964.7	932.9	921.8	848.7	834.4
47.5°	2256.8	1157.8	916.2	901.1	935.3	963.1	944.0	897.9	848.7	800.2	791.5
50°	2445.1	1206.3	894.8	858.2	900.3	944.0	929.7	875.7	824.8	795.4	789.9
52.5°	2654.1	1267.5	868.5	810.5	857.4	935.3	932.9	872.5	802.6	782.7	778.0
55°	2912.4	1327.8	836.0	754.9	819.3	928.1	924.2	846.3	797.8	783.5	781.9
57.5°	3212.7	1415.3	789.1	698.5	775.6	898.7	890.0	830.4	781.9	771.6	770.8
60°	3696.7	1551.1	722.3	646.8	731.1	847.1	858.2	803.4	756.5	754.1	753.3
62.5°	4333.2	1741.9	653.2	593.6	679.4	780.3	812.1	766.8	729.5	741.4	743.0
65°	5212.1	1902.4	581.7	548.3	622.2	716.0	768.4	732.7	699.3	722.3	722.3
67.5°	5785.0	1905.6	516.5	501.4	564.2	661.9	722.3	692.1	660.3	699.3	700.9
70°	5665.8	1669.5	462.5	452.2	507.8	603.9	671.5	647.6	611.1	646.0	633.3
71°	5473.5	1538.4	441.0	433.1	485.5	576.1	647.6	627.8	591.2	614.3	607.1
72.5°	5166.8	1335.8	406.1	407.7	452.2	541.2	614.3	593.6	557.0	569.8	567.4
75°	4367.3	1166.5	347.3	354.4	388.6	481.6	547.5	531.6	494.3	494.3	491.9
77.5°	2730.4	815.3	288.5	292.4	329.8	412.4	470.4	456.9	421.2	409.2	406.1
80°	1018.7	421.2	225.7	230.4	253.5	325.0	389.4	376.7	340.1	326.6	313.9
82.5°	385.4	211.4	166.1	162.1	186.7	247.9	305.1	290.0	261.4	228.9	219.3
85°	145.4	104.9	101.7	98.5	109.7	147.0	189.1	185.9	155.7	132.7	130.3
87.5°	38.1	34.2	39.7	29.4	31.0	27.8	28.6	11.9	5.6	2.4	1.6
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)