

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: P453601

Luminaire Tested: **GALN-SA4C-827-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453601
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-SA4C-827-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20562 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

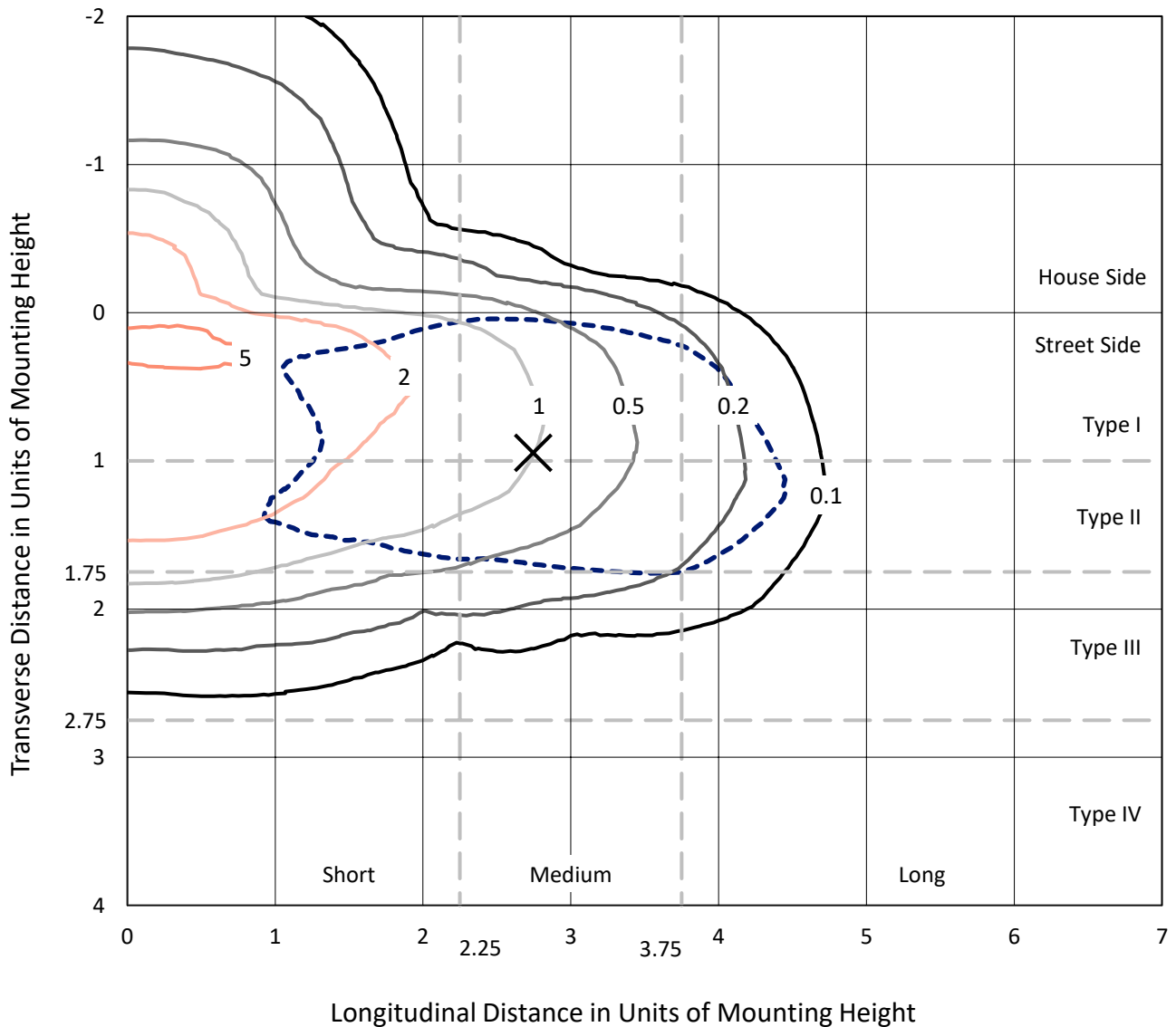
Input Watts (W): 213
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

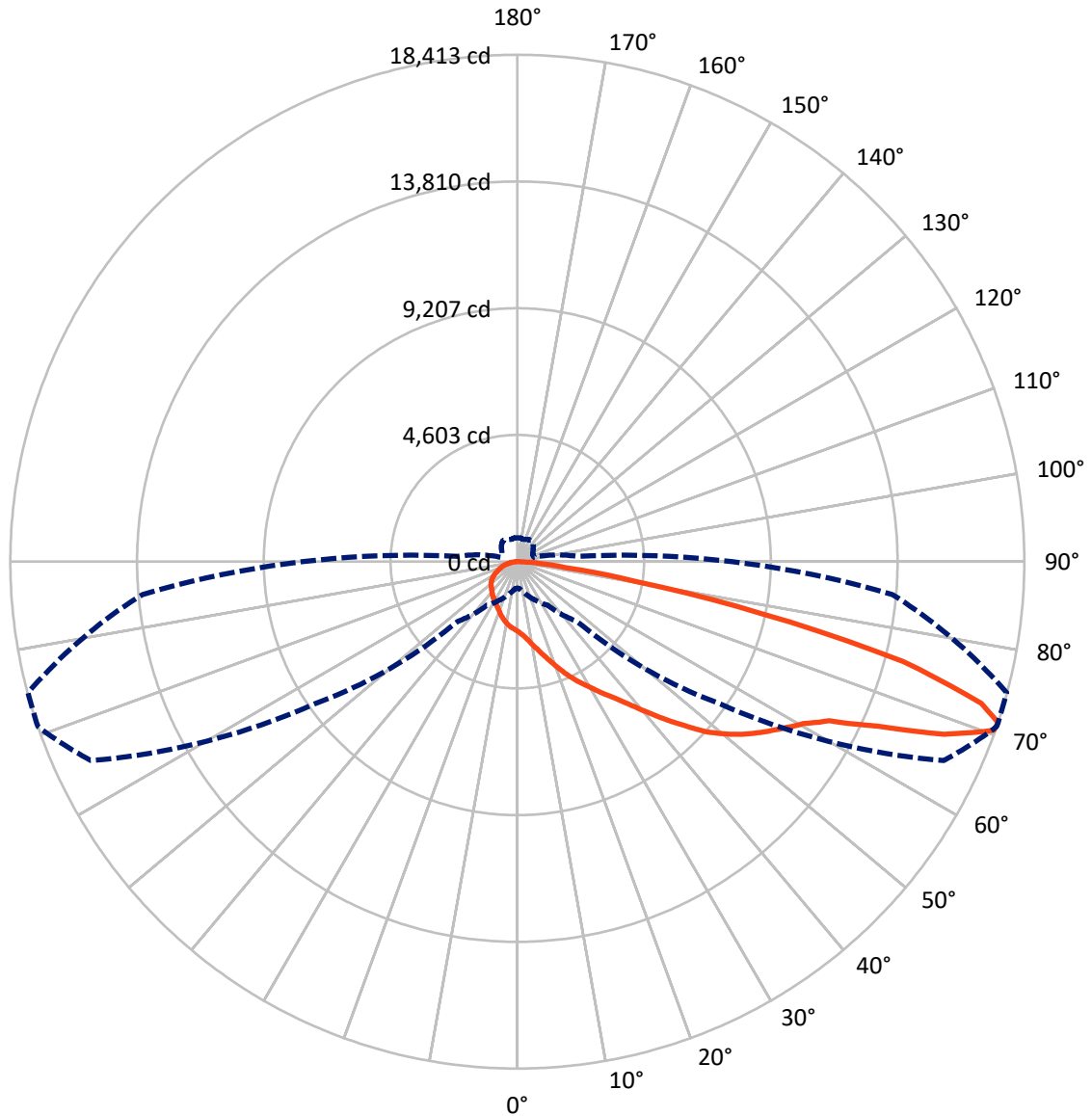
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 71-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical



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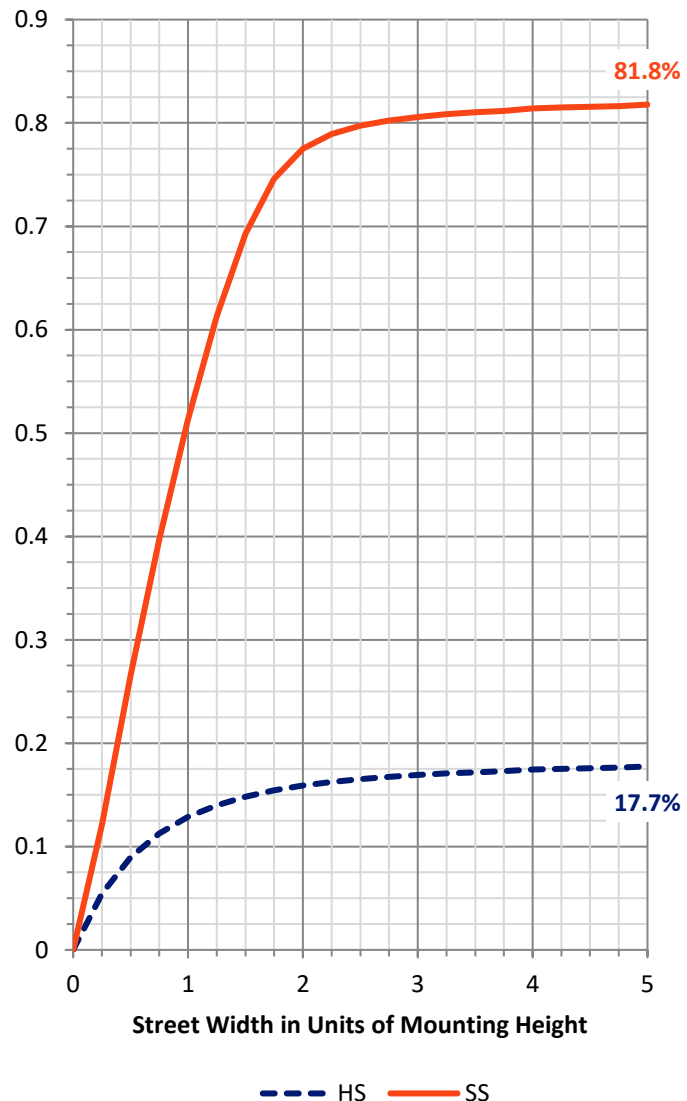
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3698.0	0.0	3698.0
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	16864.0	0.0	16864.0
	% Fixture	82.0	0.0	82.0
Total	Lumens	20562.0	0.0	20562.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.4	1.2
10°-20°	823.2	4.0
20°-30°	1438.7	7.0
30°-40°	2139.8	10.4
40°-50°	3152.7	15.3
50°-60°	4413.9	21.5
60°-70°	4936.8	24.0
70°-80°	3015.6	14.7
80°-90°	387.9	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°	20562.0	100.0
0°-180°	20562.0	100.0



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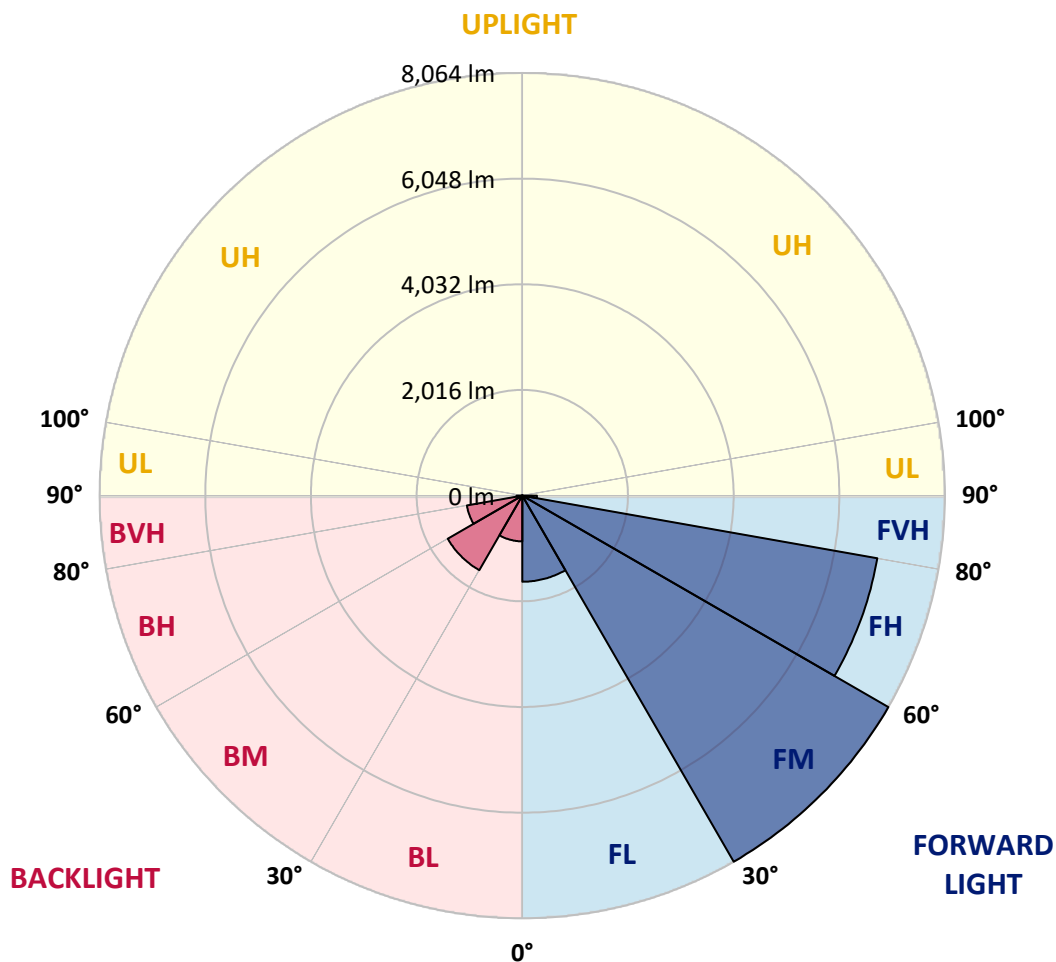
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1642.9	8.0			
FM	(30°-60°)	8064.0	39.2			
FH	(60°-80°)	6877.9	33.4			G3/7500
FVH	(80°-90°)	279.1	1.4			G3/500
BL	(0°-30°)	872.4	4.2	B2/1000		
BM	(30°-60°)	1642.4	8.0	B2/2500		
BH	(60°-80°)	1074.4	5.2	B3/2500		G3/2500
BVH	(80°-90°)	108.8	0.5			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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	2523.6	2523.6	2523.6	2523.6	2523.6	2523.6	2523.6	2523.6	2523.6	2523.6	2523.6
2.5°	2801.6	2788.0	2789.2	2769.9	2745.1	2718.0	2679.5	2645.6	2618.5	2602.7	2556.4
5°	3104.5	3090.9	3074.0	3032.1	3014.1	2947.4	2862.6	2785.8	2727.0	2694.2	2601.6
7.5°	3349.7	3346.3	3341.8	3318.1	3271.7	3179.1	3106.7	2973.4	2886.4	2824.2	2666.0
10°	3501.1	3506.8	3510.2	3514.7	3495.5	3446.9	3347.4	3179.1	3068.3	2989.2	2749.6
12.5°	3578.0	3583.6	3602.9	3644.7	3670.7	3665.0	3583.6	3418.6	3266.1	3162.1	2838.9
15°	3625.5	3634.5	3668.4	3723.8	3810.8	3866.2	3826.6	3674.1	3506.8	3383.6	2945.1
17.5°	3677.4	3687.6	3724.9	3804.0	3918.2	4038.0	4080.9	3949.8	3767.9	3620.9	3063.8
20°	3706.8	3720.4	3773.5	3877.5	4010.8	4184.9	4327.3	4258.3	4059.4	3896.7	3200.5
22.5°	3754.3	3765.6	3810.8	3921.6	4080.9	4299.0	4573.6	4558.9	4383.8	4173.6	3350.8
25°	3883.1	3901.2	3923.8	3990.5	4144.2	4415.4	4778.2	4879.9	4697.9	4462.9	3488.7
27.5°	4126.1	4140.8	4139.7	4148.7	4235.7	4516.0	4955.6	5197.5	5009.9	4755.6	3622.1
30°	4403.0	4408.6	4413.2	4392.8	4412.0	4618.8	5118.4	5511.6	5324.0	5056.2	3738.5
32.5°	4739.8	4751.1	4712.6	4660.7	4644.8	4771.4	5252.8	5825.8	5695.9	5361.3	3853.7
35°	5137.6	5167.0	5089.0	4997.4	4933.0	4990.7	5433.7	6146.8	6076.7	5751.2	4006.3
37.5°	5591.9	5628.0	5555.7	5376.0	5284.5	5300.3	5669.9	6543.5	6558.1	6195.4	4233.5
40°	5963.7	6011.2	6013.4	5759.1	5620.1	5638.2	5969.3	6970.6	7139.0	6744.6	4501.3
42.5°	6208.9	6255.3	6303.9	6154.7	6008.9	6111.7	6318.6	7434.0	7792.2	7411.4	4875.4
45°	6477.9	6519.7	6546.8	6479.0	6397.7	6664.4	6740.1	7926.7	8488.4	8156.1	5284.5
47.5°	6789.8	6836.2	6862.1	6797.7	6767.2	7149.2	7194.4	8386.7	9232.0	8879.4	5736.5
50°	7205.7	7240.7	7227.2	7186.5	7179.7	7521.0	7630.6	8817.3	9845.7	9658.1	6205.5
52.5°	7723.3	7765.1	7779.8	7722.2	7696.2	7786.6	7982.1	9209.4	10404.0	10327.1	6706.2
55°	8036.4	8103.0	8326.8	8417.2	8479.4	8130.2	8360.7	9642.3	10904.6	11032.3	7244.1
57.5°	7635.2	7721.0	8221.7	8673.7	9258.0	8989.1	8897.5	10094.3	11405.3	11716.1	7888.3
60°	6656.5	6675.7	7321.0	8153.9	9329.2	10093.2	10017.5	10813.1	11947.7	12405.4	8737.0
62.5°	4617.7	4658.4	5421.2	6750.3	8450.0	10491.0	11922.9	12054.0	12725.3	13437.2	9981.3
65°	2381.2	2328.1	3023.1	4242.5	6370.5	9546.2	13466.6	14335.7	14411.4	15051.1	11733.0
67.5°	1465.8	1489.5	1815.0	2477.2	3766.7	6937.9	13305.0	17123.7	16724.8	17032.2	13359.3
70°	1100.7	1130.1	1353.9	1695.2	2296.4	3966.8	10700.1	17799.5	18356.7	18277.6	13854.3
71°	957.2	987.7	1220.5	1542.6	1929.1	3061.5	9015.0	17092.1	18413.2	18399.6	13667.8
72.5°	816.0	835.2	1017.1	1306.4	1626.3	2146.1	6772.9	15329.1	17627.8	18078.7	13002.1
75°	640.8	655.5	736.8	996.8	1280.4	1317.7	3634.5	11492.3	14478.1	15337.0	10824.4
77.5°	522.1	532.3	574.1	740.2	987.7	933.5	1906.5	7480.3	9070.4	9935.0	6376.2
80°	414.8	426.1	450.9	501.8	740.2	665.6	909.8	3790.5	4381.5	4372.5	2545.1
82.5°	322.1	325.5	354.9	368.4	506.3	472.4	492.7	1604.8	1777.7	1836.5	918.8
85°	203.4	213.6	314.2	282.5	302.9	276.9	243.0	637.4	785.4	774.1	367.3
87.5°	62.2	65.5	106.2	119.8	134.5	120.9	89.3	187.6	229.4	248.6	91.5
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°	2523.6	2523.6	2523.6	2523.6	2523.6	2523.6	2523.6	2523.6	2523.6	2523.6	2523.6
2.5°	2538.3	2525.8	2481.8	2445.6	2411.7	2374.4	2342.8	2333.7	2325.8	2322.4	2321.3
5°	2562.0	2524.7	2437.7	2366.5	2310.0	2258.0	2225.2	2210.5	2195.8	2195.8	2200.4
7.5°	2595.9	2528.1	2393.6	2287.4	2216.2	2167.6	2143.9	2141.6	2145.0	2148.4	2149.5
10°	2633.2	2525.8	2329.2	2197.0	2133.7	2111.1	2112.2	2131.4	2149.5	2163.1	2165.3
12.5°	2669.4	2512.3	2253.5	2112.2	2071.5	2076.0	2107.7	2150.6	2185.7	2204.9	2206.0
15°	2710.1	2490.8	2161.9	2032.0	2018.4	2053.4	2112.2	2177.8	2230.9	2262.5	2265.9
17.5°	2744.0	2454.6	2065.9	1954.0	1970.9	2035.4	2116.7	2201.5	2265.9	2305.5	2312.2
20°	2782.4	2408.3	1966.4	1879.4	1928.0	2015.0	2107.7	2199.2	2265.9	2304.3	2313.4
22.5°	2812.9	2342.8	1871.5	1818.4	1889.6	1990.2	2077.2	2150.6	2204.9	2225.2	2238.8
25°	2825.3	2260.3	1782.2	1768.7	1859.1	1949.5	2008.2	2050.1	2067.0	2064.7	2070.4
27.5°	2818.5	2165.3	1705.4	1729.1	1820.6	1886.2	1915.6	1912.2	1881.7	1853.4	1867.0
30°	2790.3	2052.3	1640.9	1688.4	1770.9	1807.1	1802.6	1758.5	1700.8	1647.7	1651.1
32.5°	2739.4	1930.3	1581.1	1642.1	1700.8	1716.7	1686.2	1628.5	1546.0	1477.1	1466.9
35°	2696.5	1813.9	1527.9	1589.0	1630.8	1622.9	1593.5	1518.9	1444.3	1383.3	1373.1
37.5°	2689.7	1714.4	1477.1	1529.1	1552.8	1541.5	1505.3	1442.0	1414.9	1368.6	1362.9
40°	2725.9	1644.3	1425.1	1465.8	1477.1	1468.0	1428.5	1392.3	1417.2	1405.9	1405.9
42.5°	2824.2	1607.0	1378.8	1402.5	1411.5	1418.3	1390.1	1359.5	1390.1	1338.1	1321.1
45°	2980.2	1608.2	1336.9	1340.3	1367.5	1391.2	1372.0	1326.8	1311.0	1207.0	1186.6
47.5°	3209.6	1646.6	1303.0	1281.6	1330.2	1369.7	1342.6	1277.0	1207.0	1138.0	1125.6
50°	3477.4	1715.5	1272.5	1220.5	1280.4	1342.6	1322.3	1245.4	1173.1	1131.3	1123.3
52.5°	3774.6	1802.6	1235.2	1152.7	1219.4	1330.2	1326.8	1240.9	1141.4	1113.2	1106.4
55°	4141.9	1888.4	1188.9	1073.6	1165.2	1320.0	1314.3	1203.6	1134.7	1114.3	1112.0
57.5°	4569.1	2012.8	1122.2	993.4	1103.0	1278.2	1265.7	1181.0	1112.0	1097.4	1096.2
60°	5257.4	2206.0	1027.3	919.9	1039.7	1204.7	1220.5	1142.6	1075.9	1072.5	1071.4
62.5°	6162.6	2477.2	929.0	844.2	966.3	1109.8	1155.0	1090.6	1037.5	1054.4	1056.7
65°	7412.5	2705.5	827.3	779.8	884.9	1018.2	1092.8	1042.0	994.5	1027.3	1027.3
67.5°	8227.3	2710.1	734.6	713.1	802.4	941.4	1027.3	984.3	939.1	994.5	996.8
70°	8057.8	2374.4	657.7	643.0	722.2	858.9	955.0	921.1	869.1	918.8	900.7
71°	7784.3	2187.9	627.2	615.9	690.5	819.3	921.1	892.8	840.8	873.6	863.4
72.5°	7348.1	1899.7	577.5	579.8	643.0	769.6	873.6	844.2	792.2	810.3	806.9
75°	6211.2	1659.0	493.9	504.0	552.6	684.9	778.7	756.1	702.9	702.9	699.6
77.5°	3883.1	1159.5	410.2	415.9	469.0	586.5	669.0	649.8	599.0	582.0	577.5
80°	1448.8	599.0	321.0	327.7	360.5	462.2	553.8	535.7	483.7	464.5	446.4
82.5°	548.1	300.6	236.2	230.5	265.6	352.6	434.0	412.5	371.8	325.5	311.9
85°	206.8	149.2	144.7	140.1	156.0	209.1	269.0	264.5	221.5	188.7	185.3
87.5°	54.2	48.6	56.5	41.8	44.1	39.6	40.7	17.0	7.9	3.4	2.3
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)