

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: P318218

Luminaire Tested: **GLEON-SA4D-827-U-T2**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P318218
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-12)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA4D-827-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22578 lumens
Efficiency: N/A
Efficacy: 87.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

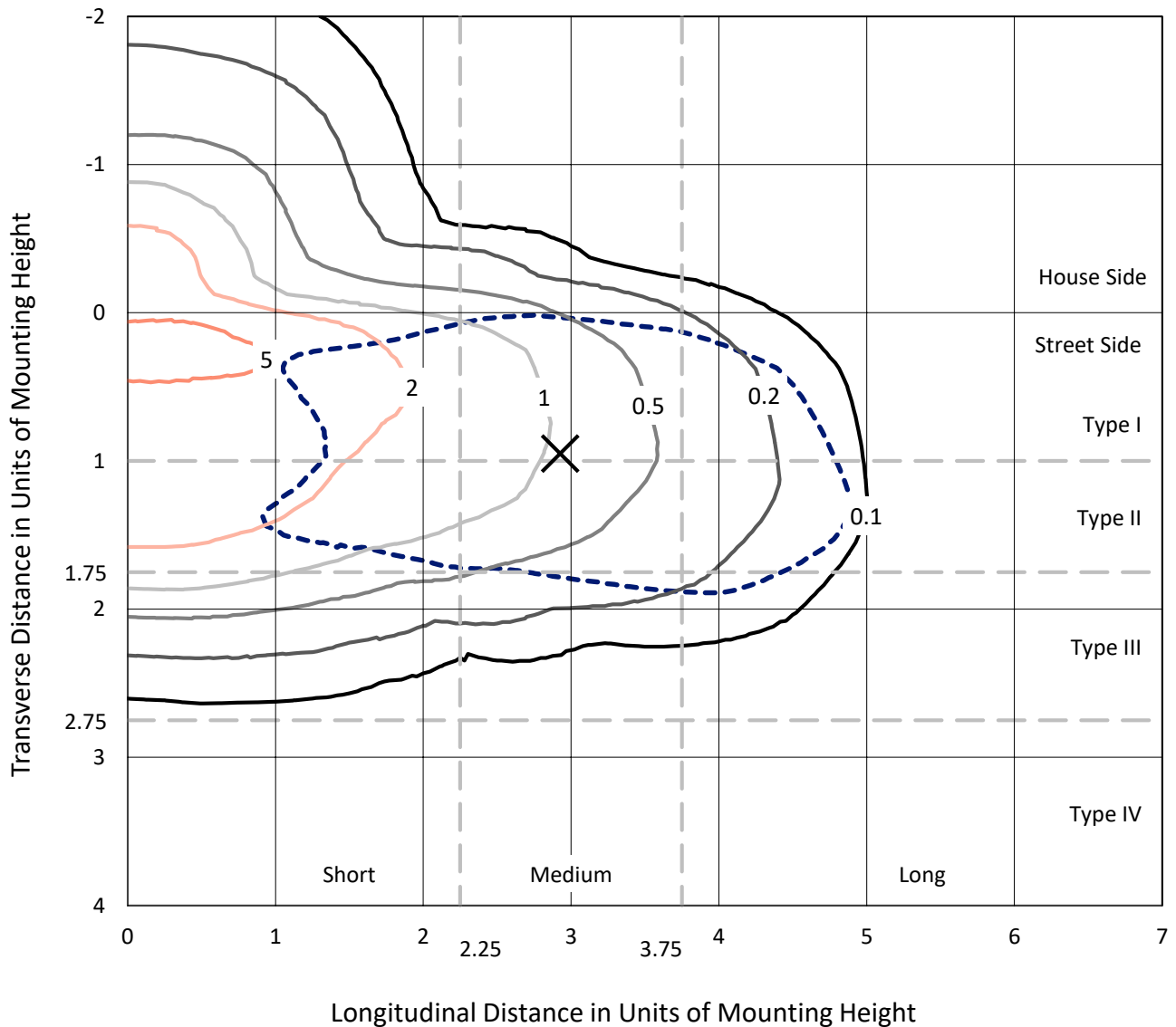
Input Watts (W): 258
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

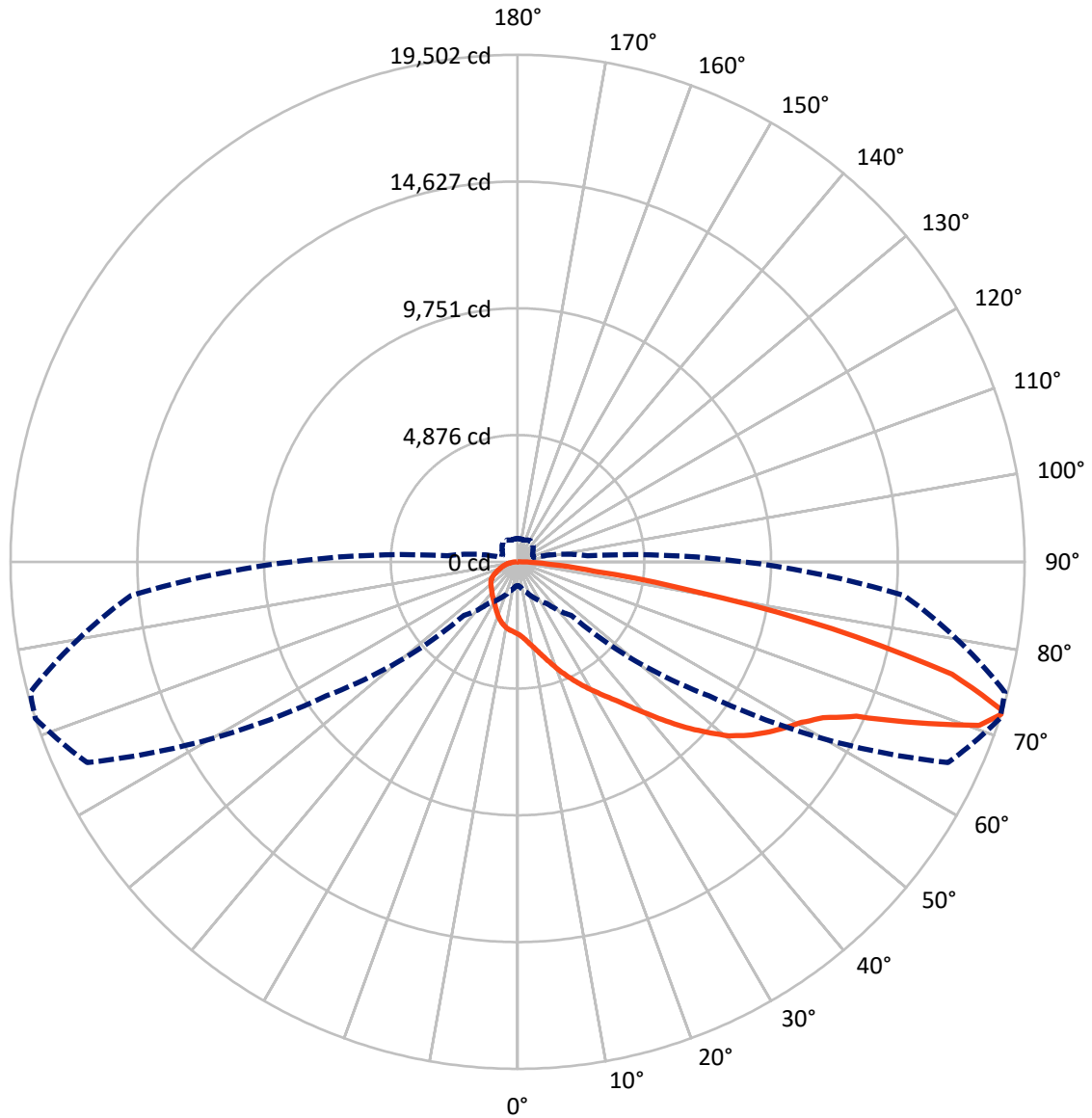
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 72-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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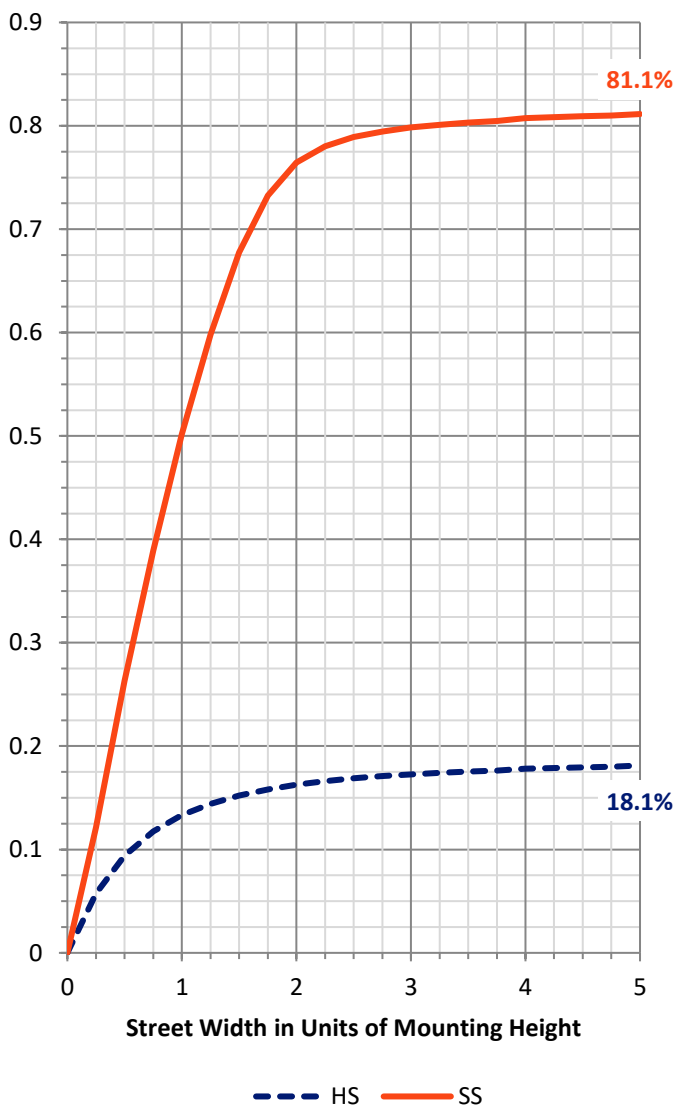
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4188.4	0.0	4188.4
	% Fixture	18.6	0.0	18.6
Street Side	Lumens	18389.6	0.0	18389.6
	% Fixture	81.4	0.0	81.4
Total	Lumens	22578.0	0.0	22578.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.3	1.2
10°-20°	899.4	4.0
20°-30°	1576.1	7.0
30°-40°	2336.9	10.4
40°-50°	3417.8	15.1
50°-60°	4702.9	20.8
60°-70°	5235.7	23.2
70°-80°	3547.7	15.7
80°-90°	583.1	2.6
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°	22578.0	100.0
0°-180°	22578.0	100.0

Coefficient of Utilization

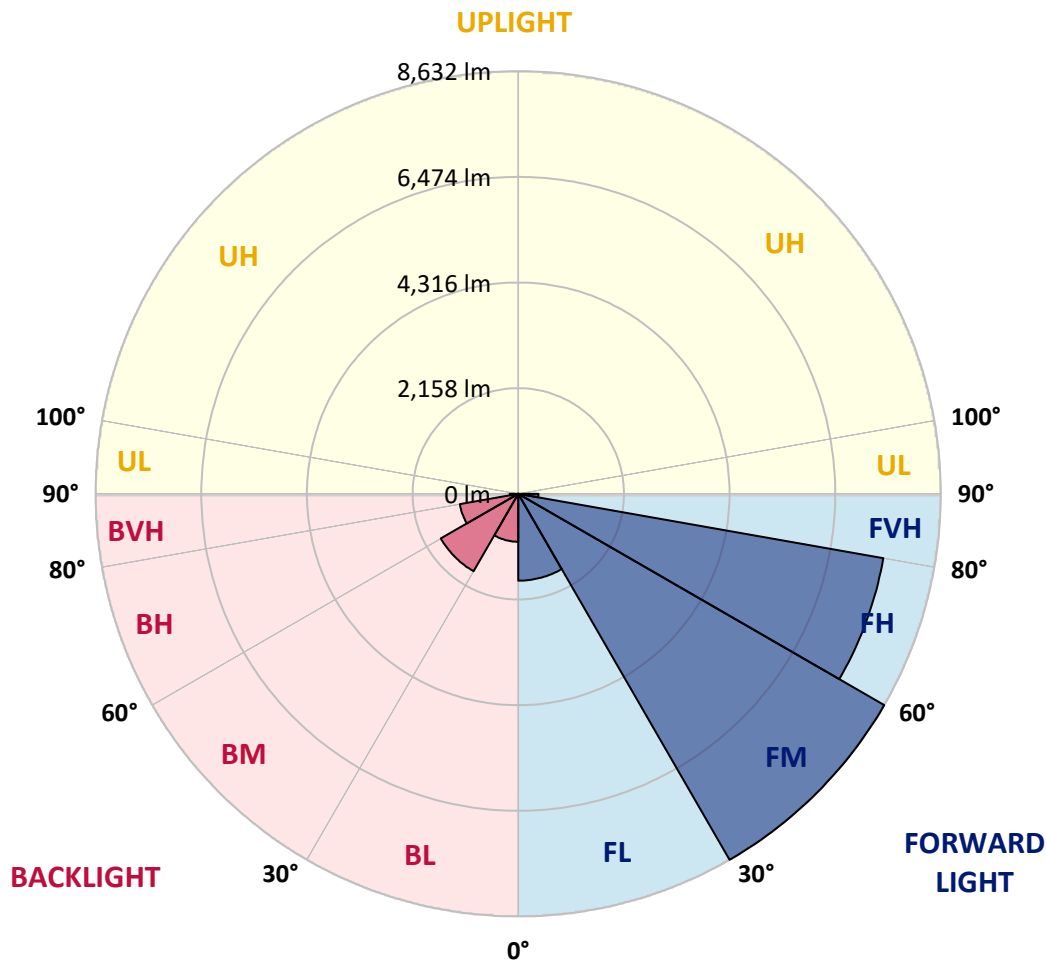


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1774.8	7.9			
FM (30°-60°)	8631.9	38.2			
FH (60°-80°)	7571.7	33.5			G4/12000
FVH (80°-90°)	411.3	1.8			G3/500
BL (0°-30°)	979.1	4.3	B2/1000		
BM (30°-60°)	1825.7	8.1	B2/2500		
BH (60°-80°)	1211.8	5.4	B3/2500		G3/2500
BVH (80°-90°)	171.8	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	72°	75°	85°
0°	2777.7	2777.7	2777.7	2777.7	2777.7	2777.7	2777.7	2777.7	2777.7	2777.7	2777.7
2.5°	3068.4	3063.8	3047.4	3047.4	3016.3	2989.9	2940.2	2906.7	2867.1	2853.1	2806.4
5°	3365.4	3367.0	3346.7	3332.8	3286.9	3230.9	3146.2	3069.2	2992.2	2961.2	2865.5
7.5°	3615.0	3611.8	3606.4	3594.7	3552.0	3494.5	3380.2	3265.9	3152.4	3105.7	2940.9
10°	3775.1	3782.1	3786.8	3792.2	3774.3	3733.1	3625.1	3485.9	3337.4	3273.7	3031.1
12.5°	3855.9	3868.4	3890.2	3927.5	3957.0	3952.3	3873.8	3726.1	3549.7	3469.6	3143.8
15°	3903.4	3919.7	3953.9	4020.8	4103.9	4151.4	4130.4	3996.7	3800.0	3701.2	3281.4
17.5°	3932.9	3946.1	3999.0	4088.4	4212.0	4337.9	4393.1	4281.2	4083.0	3970.2	3439.3
20°	3953.1	3963.2	4029.3	4134.3	4294.4	4495.0	4648.9	4620.9	4394.7	4248.5	3604.1
22.5°	3998.2	4006.8	4069.7	4175.5	4352.7	4611.6	4895.3	4937.3	4723.5	4558.0	3780.5
25°	4124.2	4124.2	4177.0	4250.9	4417.2	4712.7	5103.7	5289.5	5059.4	4866.6	3943.8
27.5°	4364.4	4362.0	4381.5	4407.1	4533.1	4815.3	5289.5	5600.5	5407.7	5197.0	4102.4
30°	4648.9	4664.5	4666.8	4654.3	4713.4	4943.5	5461.3	5928.5	5758.3	5531.3	4264.9
32.5°	5015.1	5025.2	5013.5	4972.3	4963.8	5125.5	5630.0	6272.1	6137.6	5880.3	4413.4
35°	5480.0	5460.5	5424.0	5340.0	5260.0	5368.8	5822.8	6615.8	6563.7	6302.5	4617.8
37.5°	5978.3	5979.1	5934.0	5743.5	5633.1	5679.8	6088.7	7005.2	7079.1	6804.7	4879.8
40°	6377.9	6398.9	6426.8	6176.5	6033.5	6098.0	6426.8	7456.9	7688.6	7400.2	5221.1
42.5°	6657.0	6681.1	6760.4	6603.3	6454.8	6574.5	6824.9	7938.9	8372.7	8087.4	5620.7
45°	6952.4	6965.6	7021.6	6953.9	6859.1	7128.8	7273.4	8438.0	9096.5	8819.7	6067.7
47.5°	7263.3	7277.3	7334.9	7289.8	7240.0	7646.6	7741.4	8908.3	9789.9	9624.3	6545.0
50°	7647.4	7656.7	7711.1	7629.5	7645.0	8036.9	8159.7	9339.8	10516.8	10347.3	7023.9
52.5°	8171.3	8173.7	8249.1	8175.2	8102.2	8322.9	8519.6	9746.4	11086.6	11006.6	7502.8
55°	8581.8	8606.7	8853.9	8838.4	8796.4	8582.6	8820.5	10133.5	11595.1	11633.2	8011.2
57.5°	8319.8	8417.0	8917.7	9270.6	9614.2	9228.6	9227.1	10569.7	12067.7	12248.1	8570.2
60°	7286.7	7418.8	8156.6	8939.4	10014.6	10352.8	10071.3	11102.2	12545.1	12857.6	9270.6
62.5°	5204.0	5421.7	6421.4	7671.5	9465.7	11097.5	11789.4	11947.2	13194.2	13563.5	10181.0
65°	2630.8	2795.6	3633.6	5139.5	7562.6	10610.9	13656.7	13797.5	14322.2	14650.3	11582.6
67.5°	1598.4	1660.5	2069.5	2858.5	4636.5	8265.4	14266.2	16881.4	16505.2	16679.3	13581.3
70°	1177.8	1223.6	1478.6	1898.4	2666.5	4850.3	12395.8	19082.3	18835.1	18815.6	15058.4
72°	917.3	950.8	1176.2	1533.8	1949.7	2909.8	8984.5	18269.9	19502.1	19404.1	14923.1
72.5°	869.9	899.5	1104.7	1443.6	1842.5	2637.7	8078.1	17721.8	19453.9	19409.6	14748.2
75°	684.9	705.9	817.8	1116.4	1442.1	1496.5	4426.6	13733.7	17257.7	17975.3	13264.9
77.5°	566.7	569.8	628.9	812.4	1124.1	1058.1	2174.4	9528.7	12357.7	13146.8	9396.5
80°	461.8	465.7	493.7	569.8	850.5	782.9	1032.4	5479.2	6918.9	6927.5	4468.5
82.5°	367.7	368.5	399.6	416.7	611.0	559.7	591.6	2572.4	3023.3	2908.3	1606.1
85°	258.9	253.4	390.3	342.1	399.6	359.2	326.5	1018.4	1250.1	1195.7	503.0
87.5°	86.3	89.4	173.4	221.6	233.2	203.7	145.4	390.3	471.9	468.0	159.4
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°	2777.7	2777.7	2777.7	2777.7	2777.7	2777.7	2777.7	2777.7	2777.7	2777.7	2777.7
2.5°	2791.7	2766.8	2730.3	2689.8	2658.0	2625.3	2601.2	2588.8	2574.8	2563.1	2577.1
5°	2821.2	2774.6	2696.8	2620.6	2564.7	2514.9	2479.2	2460.5	2443.4	2431.7	2433.3
7.5°	2869.4	2794.0	2663.4	2552.2	2474.5	2420.9	2384.3	2371.9	2361.0	2357.9	2361.8
10°	2920.7	2809.6	2619.1	2471.4	2382.8	2338.4	2322.1	2330.7	2338.4	2345.4	2353.2
12.5°	2979.0	2823.6	2554.6	2376.5	2301.1	2284.0	2300.4	2337.7	2364.9	2381.2	2391.3
15°	3055.2	2836.0	2479.9	2281.7	2231.2	2250.6	2305.8	2370.3	2417.7	2448.1	2452.7
17.5°	3125.2	2835.2	2384.3	2186.1	2174.4	2231.2	2314.3	2405.3	2469.1	2511.8	2520.4
20°	3197.5	2814.2	2273.1	2092.8	2116.9	2210.2	2318.2	2427.8	2504.8	2554.6	2566.2
22.5°	3265.1	2777.7	2151.1	2008.0	2068.7	2182.2	2303.5	2414.6	2491.6	2532.0	2544.5
25°	3311.0	2713.9	2027.5	1936.5	2025.9	2148.0	2255.3	2344.7	2402.2	2422.4	2425.5
27.5°	3334.3	2630.8	1910.9	1874.3	1981.6	2092.0	2165.9	2210.2	2226.5	2224.9	2221.8
30°	3337.4	2521.1	1810.6	1823.8	1930.3	2009.6	2044.6	2036.0	2015.0	1979.3	1982.4
32.5°	3327.3	2397.5	1726.6	1775.6	1865.0	1909.3	1910.9	1869.7	1813.7	1756.9	1741.4
35°	3330.4	2276.3	1652.8	1721.2	1785.7	1805.1	1787.3	1726.6	1650.4	1577.4	1561.8
37.5°	3364.6	2170.5	1589.0	1658.2	1697.9	1702.5	1676.9	1613.1	1557.2	1485.6	1479.4
40°	3446.3	2095.1	1528.4	1587.5	1610.0	1612.3	1575.8	1530.7	1535.4	1497.3	1496.5
42.5°	3593.2	2062.5	1474.7	1513.6	1527.6	1532.3	1504.3	1475.5	1515.9	1491.1	1482.5
45°	3782.9	2070.2	1429.7	1441.3	1467.0	1488.7	1471.6	1436.7	1452.2	1344.1	1308.4
47.5°	4002.1	2120.0	1393.9	1379.1	1423.4	1464.6	1438.2	1385.3	1330.1	1222.9	1202.7
50°	4258.6	2197.0	1361.2	1317.7	1376.0	1432.0	1405.6	1330.1	1247.0	1194.9	1187.9
52.5°	4526.1	2291.0	1328.6	1250.1	1316.2	1407.1	1393.9	1317.7	1215.1	1163.8	1154.5
55°	4829.3	2385.9	1287.4	1171.6	1251.6	1395.4	1388.5	1272.6	1191.0	1162.2	1155.2
57.5°	5206.3	2493.9	1233.0	1089.9	1191.0	1353.5	1331.7	1245.4	1166.1	1144.3	1142.0
60°	5697.6	2653.3	1154.5	1002.9	1117.1	1288.9	1284.3	1205.8	1126.5	1110.9	1107.8
62.5°	6434.6	2916.8	1046.4	915.8	1034.7	1179.3	1222.1	1152.1	1084.5	1083.7	1085.3
65°	7577.4	3313.3	929.0	839.6	951.5	1086.8	1149.8	1096.9	1041.7	1057.3	1059.6
67.5°	8902.1	3642.2	813.9	765.0	866.8	999.0	1084.5	1041.7	985.0	1025.4	1026.2
70°	9342.9	3348.3	712.9	691.1	779.0	914.2	1013.7	981.1	923.6	964.0	960.1
72°	8694.5	2703.1	647.6	635.1	712.9	844.3	950.8	924.3	867.6	894.8	884.7
72.5°	8490.1	2577.1	631.3	621.1	695.0	826.4	934.4	910.3	853.6	876.9	867.6
75°	7573.5	2238.2	542.6	545.0	606.4	739.3	842.7	834.9	776.6	779.0	775.9
77.5°	5493.2	1641.1	457.1	472.7	516.2	649.9	750.2	745.5	681.8	670.1	667.8
80°	2549.1	837.3	372.4	379.4	424.5	543.4	639.8	633.6	582.3	567.5	559.0
82.5°	873.0	398.0	279.9	284.5	328.8	437.7	555.1	551.2	508.4	479.7	461.8
85°	311.7	198.2	195.9	191.2	234.8	344.4	483.5	462.6	399.6	340.5	339.0
87.5°	101.1	84.7	101.1	100.3	136.8	233.2	351.4	299.3	290.0	241.0	236.3
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)