

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: P317578

Luminaire Tested: **GLEON-SA4D-827-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P317578
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-8)
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-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23971 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

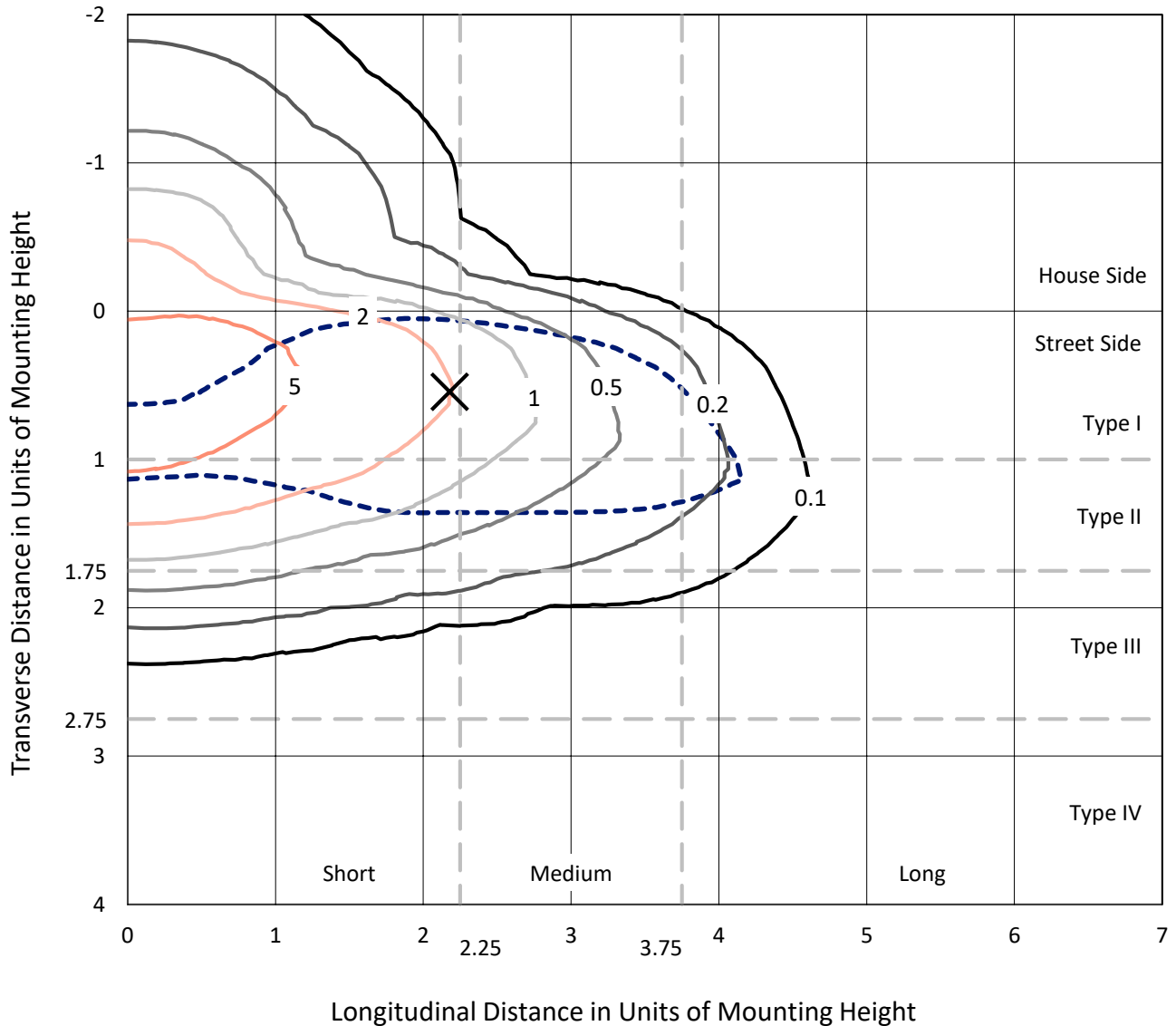
Input Watts (W): 258
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

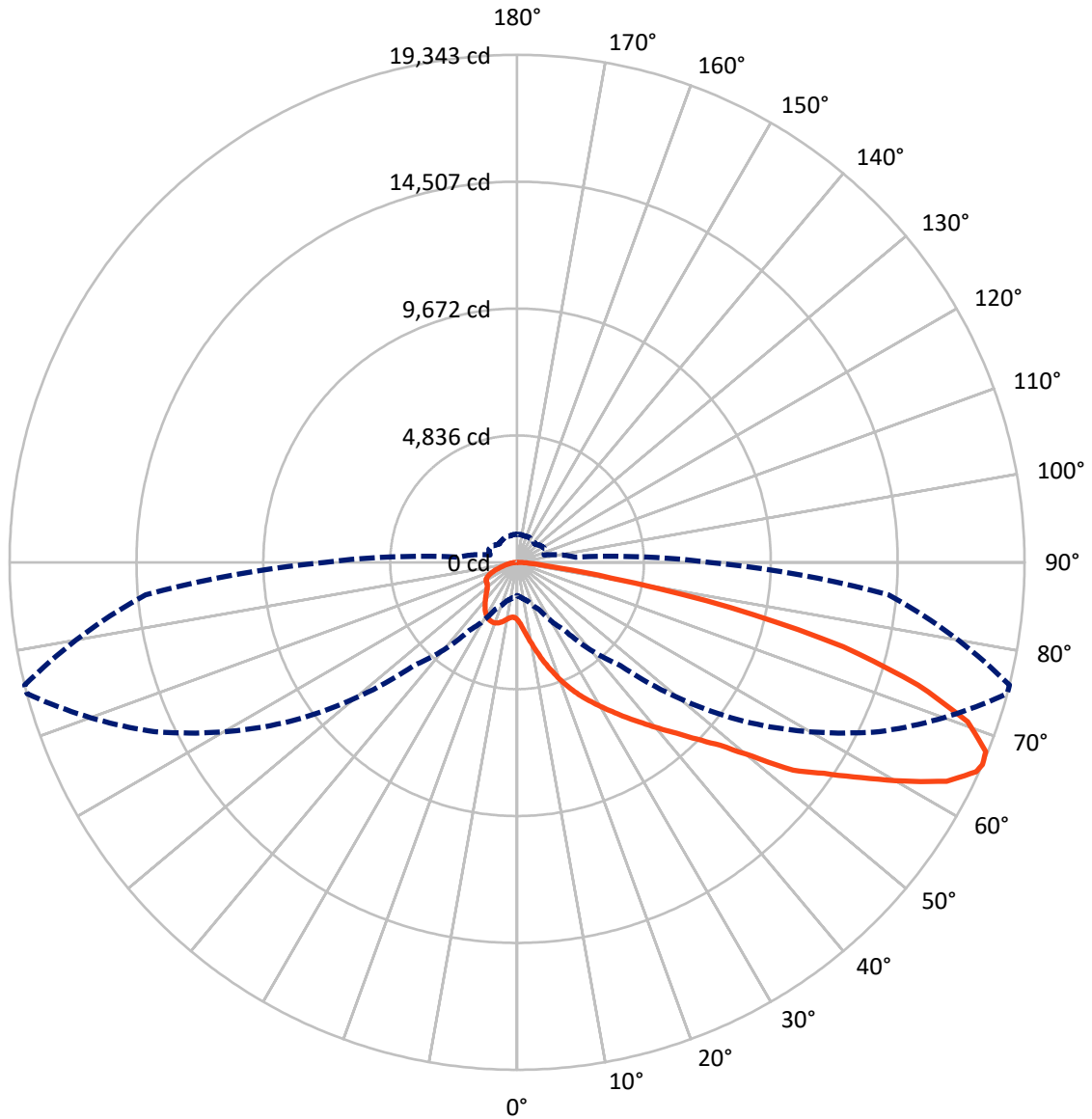
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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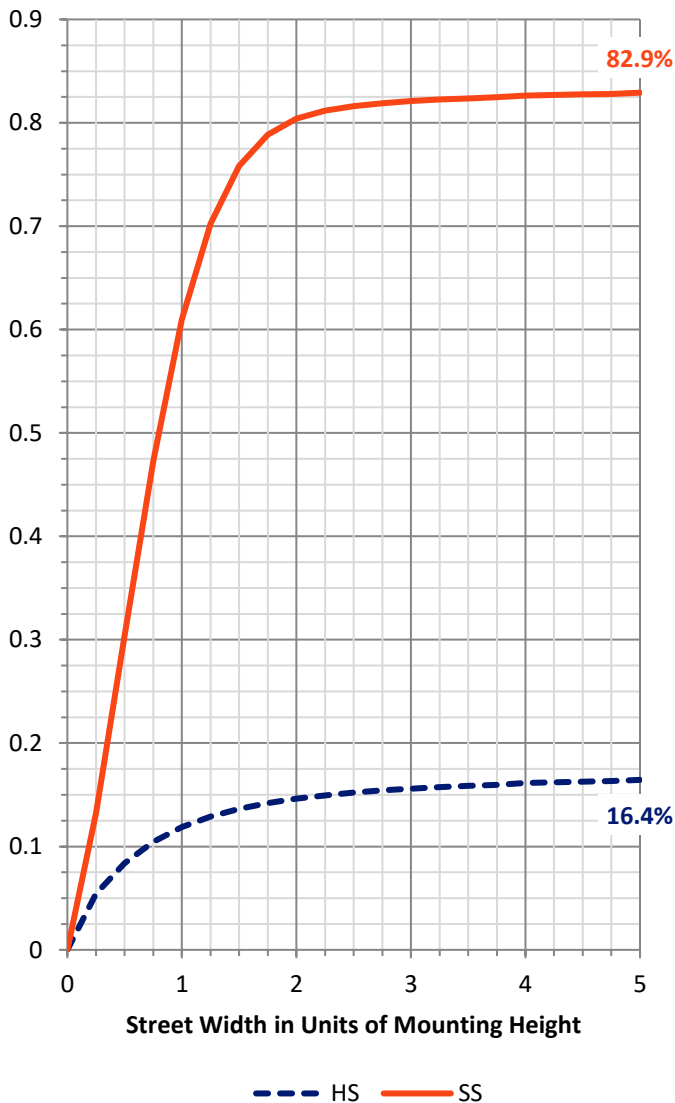
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4033.5	0.0	4033.5
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	19937.5	0.0	19937.5
	% Fixture	83.2	0.0	83.2
Total	Lumens	23971.0	0.0	23971.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.7	1.1
10°-20°	1045.4	4.4
20°-30°	2031.4	8.5
30°-40°	3315.7	13.8
40°-50°	4530.0	18.9
50°-60°	5276.6	22.0
60°-70°	4730.5	19.7
70°-80°	2390.6	10.0
80°-90°	386.1	1.6
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°	23971.0	100.0
0°-180°	23971.0	100.0

Coefficient of Utilization



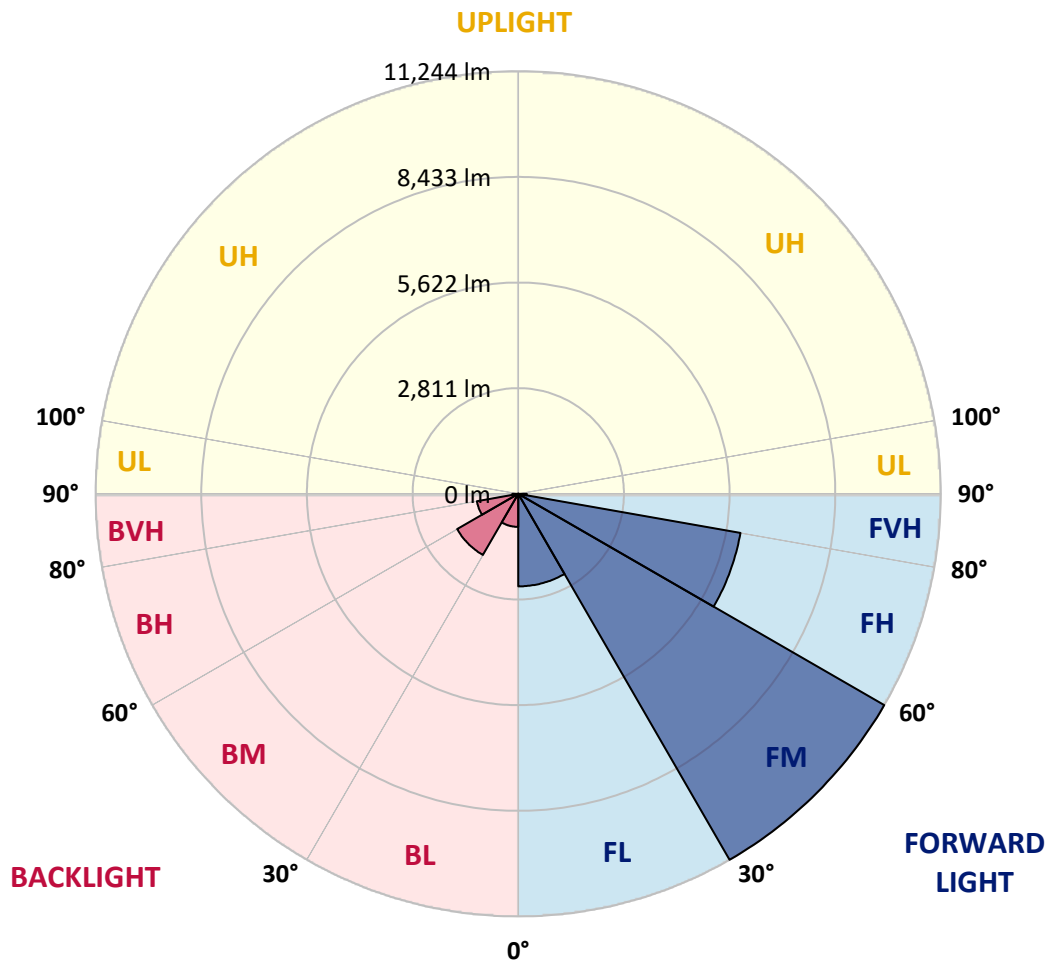
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2461.8	10.3			
FM (30°-60°)	11244.1	46.9			
FH (60°-80°)	6003.7	25.0			G3/7500
FVH (80°-90°)	228.0	1.0			G3/500
BL (0°-30°)	879.7	3.7	B2/1000		
BM (30°-60°)	1878.2	7.8	B2/2500		
BH (60°-80°)	1117.5	4.7	B3/2500		G3/2500
BVH (80°-90°)	158.1	0.7			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°	65°	75°	76°	85°
0°	2189.1	2189.1	2189.1	2189.1	2189.1	2189.1	2189.1	2189.1	2189.1	2189.1	2189.1
2.5°	2906.0	2862.1	2858.0	2793.7	2779.1	2656.2	2565.9	2471.5	2364.1	2342.9	2258.3
5°	3732.9	3728.8	3672.6	3567.7	3485.5	3275.5	3068.0	2848.3	2607.4	2568.3	2377.9
7.5°	4476.7	4470.1	4427.0	4313.9	4195.1	3937.1	3640.9	3304.0	2913.4	2855.6	2539.8
10°	5041.4	5039.0	5024.3	4941.3	4840.4	4593.0	4265.9	3806.1	3269.0	3190.1	2742.5
12.5°	5477.6	5482.5	5492.3	5463.0	5415.0	5204.2	4868.9	4338.3	3648.2	3570.1	2967.9
15°	5773.0	5787.7	5838.1	5879.6	5904.9	5775.5	5450.8	4882.7	4073.0	3979.4	3217.7
17.5°	5921.9	5938.2	6025.3	6150.6	6266.2	6253.2	5995.2	5401.9	4480.7	4390.4	3486.3
20°	6050.5	6062.7	6160.4	6310.9	6515.2	6605.5	6460.7	5901.6	4927.5	4820.1	3771.1
22.5°	6423.2	6438.7	6468.0	6553.4	6734.1	6900.1	6830.1	6374.4	5336.8	5236.7	4041.3
25°	7142.6	7161.3	7097.9	7025.4	7059.6	7175.2	7188.2	6805.7	5751.9	5638.7	4331.8
27.5°	8009.3	8036.2	7927.9	7741.6	7578.8	7534.1	7518.6	7158.9	6148.2	6017.2	4619.1
30°	8858.1	8904.5	8763.7	8522.0	8223.3	8013.4	7857.9	7504.8	6538.8	6413.5	4890.1
32.5°	9687.3	9668.6	9464.4	9228.4	8878.4	8615.6	8239.6	7875.9	6978.2	6834.2	5159.4
35°	10255.4	10261.9	10072.3	9792.3	9458.7	9256.9	8750.7	8276.2	7426.6	7294.0	5465.4
37.5°	10738.8	10708.7	10493.8	10232.6	9945.3	9859.1	9348.8	8717.3	7912.5	7767.6	5790.9
40°	10899.9	10864.9	10724.1	10536.1	10305.8	10298.5	10008.8	9217.0	8461.8	8318.6	6157.9
42.5°	10802.2	10757.5	10699.7	10648.4	10577.6	10610.2	10628.9	9802.9	9065.6	8905.3	6582.7
45°	10441.7	10374.2	10414.9	10526.4	10680.2	10864.1	11188.8	10451.5	9741.9	9607.6	7081.6
47.5°	9887.5	9826.5	9953.5	10191.9	10610.2	11075.7	11718.6	11167.6	10549.1	10415.7	7792.0
50°	9107.9	9125.8	9307.3	9741.1	10373.4	11173.3	12371.2	12115.7	11722.6	11598.1	8761.3
52.5°	7828.7	7831.9	8343.0	9055.0	9953.5	11122.9	12733.4	13327.4	13325.0	13174.4	9684.1
55°	6640.5	6712.9	7117.4	8063.8	9273.1	10921.1	12986.4	13916.6	14377.2	14200.6	10544.3
57.5°	5480.1	5522.4	5905.7	6856.2	8302.3	10383.1	13246.0	14623.8	15589.8	15478.3	11613.6
60°	4160.1	4225.2	4621.5	5499.6	7060.4	9428.6	13270.5	15361.9	17039.1	16926.8	12807.4
62.5°	2700.2	2812.5	3183.5	4006.3	5558.2	8055.7	12704.1	15844.5	18412.8	18372.9	13867.0
65°	1551.9	1636.5	1894.5	2529.3	3834.6	6332.1	11357.2	15658.9	19258.3	19235.5	14263.3
66°	1267.9	1320.8	1518.5	1976.7	3164.0	5560.6	10574.4	15267.5	19342.1	19343.0	14217.7
67.5°	1014.0	1037.6	1126.3	1415.2	2334.8	4407.5	9175.5	14404.1	19238.0	19266.5	13923.9
70°	839.0	851.2	878.9	948.9	1274.4	2657.8	6512.8	12160.5	18192.3	18214.2	12777.3
72.5°	752.8	760.1	770.7	780.4	899.2	1485.2	3977.8	9728.0	15950.3	15978.8	11030.1
75°	682.0	686.0	684.4	685.2	754.4	946.4	2055.6	7263.1	12896.9	12840.0	8449.6
77.5°	598.9	603.0	594.9	596.5	667.3	727.5	1022.9	5084.6	8703.5	8301.5	4760.7
80°	506.2	509.4	506.2	511.9	581.0	549.3	594.9	2860.5	3848.4	3640.1	1692.7
82.5°	382.5	396.3	406.1	428.9	478.5	390.6	397.9	1114.1	1171.9	1115.7	519.2
85°	167.6	204.3	306.0	328.0	359.7	234.4	261.2	454.1	476.9	462.2	188.8
87.5°	43.9	48.0	151.4	190.4	199.4	105.8	135.9	206.7	218.1	206.7	62.7
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°	2189.1	2189.1	2189.1	2189.1	2189.1	2189.1	2189.1	2189.1	2189.1	2189.1	2189.1
2.5°	2213.5	2173.6	2102.0	2038.5	1990.5	1958.0	1925.4	1909.1	1899.4	1889.6	1891.2
5°	2284.3	2203.7	2080.9	1993.8	1945.0	1914.0	1897.8	1891.2	1887.2	1877.4	1877.4
7.5°	2390.9	2277.0	2107.7	2018.2	1979.9	1956.3	1946.6	1943.3	1938.4	1927.1	1928.7
10°	2525.2	2365.7	2163.9	2076.8	2041.8	2015.8	2001.9	1997.0	1988.1	1975.1	1976.7
12.5°	2683.1	2475.5	2237.9	2146.8	2104.5	2069.5	2046.7	2032.8	2017.4	2000.3	2001.1
15°	2855.6	2595.2	2317.7	2209.4	2151.7	2102.8	2066.2	2042.6	2018.2	1997.0	1996.2
17.5°	3030.6	2710.7	2378.7	2243.6	2165.5	2101.2	2051.6	2014.9	1984.8	1958.8	1956.3
20°	3219.4	2814.9	2412.9	2240.4	2139.5	2063.0	1997.0	1951.5	1918.1	1892.1	1888.0
22.5°	3411.4	2912.6	2418.6	2207.0	2081.7	1988.1	1918.9	1868.5	1834.3	1807.4	1797.7
25°	3587.2	2988.2	2395.0	2142.7	2001.1	1900.2	1832.7	1781.4	1753.7	1722.0	1712.2
27.5°	3747.5	3041.1	2347.8	2060.5	1910.8	1811.5	1748.0	1704.1	1674.0	1649.6	1641.4
30°	3891.5	3069.6	2270.5	1962.9	1818.0	1727.7	1674.0	1643.9	1617.8	1586.9	1581.2
32.5°	4028.3	3069.6	2171.2	1856.3	1726.0	1653.6	1621.9	1603.2	1573.9	1543.8	1535.6
35°	4165.0	3050.9	2054.0	1744.8	1641.4	1600.7	1599.1	1577.1	1532.4	1491.7	1481.1
37.5°	4309.0	3012.6	1922.2	1640.6	1572.2	1577.1	1591.0	1542.1	1478.7	1420.9	1405.4
40°	4471.8	2959.8	1785.5	1550.3	1514.5	1566.5	1569.0	1491.7	1368.0	1315.1	1301.2
42.5°	4663.0	2906.9	1658.5	1470.5	1468.9	1534.8	1527.5	1382.6	1308.6	1281.7	1274.4
45°	4914.5	2876.7	1538.1	1394.8	1433.1	1483.5	1456.7	1322.4	1291.5	1276.0	1269.5
47.5°	5310.8	2892.2	1427.4	1334.6	1397.3	1432.3	1324.8	1298.0	1276.0	1257.3	1250.8
50°	5807.2	2883.3	1337.9	1293.1	1356.6	1378.6	1265.4	1266.3	1254.9	1233.7	1223.9
52.5°	6180.7	2813.3	1280.1	1269.5	1320.8	1283.3	1228.0	1235.3	1229.6	1198.7	1188.1
55°	6541.2	2753.0	1250.8	1260.6	1294.7	1164.5	1184.1	1202.0	1196.3	1166.2	1161.3
57.5°	6989.6	2741.7	1232.9	1263.0	1272.8	1105.1	1141.7	1165.3	1161.3	1148.3	1145.8
60°	7538.9	2744.9	1216.6	1267.1	1248.4	1061.2	1101.9	1132.0	1134.4	1132.0	1130.4
62.5°	7840.9	2656.2	1175.9	1255.7	1205.2	1022.9	1060.4	1104.3	1105.1	1110.0	1109.2
65°	7584.5	2390.9	1100.2	1215.8	1132.8	991.2	1024.6	1072.6	1060.4	1082.3	1082.3
66°	7335.5	2237.9	1062.8	1189.8	1101.9	979.0	1013.2	1056.3	1040.8	1070.9	1070.9
67.5°	6826.9	1979.9	995.3	1134.4	1057.9	961.9	1000.1	1029.4	1008.3	1053.0	1049.8
70°	5897.5	1531.6	859.4	1009.1	985.5	936.7	982.2	975.7	944.8	1013.2	1000.1
72.5°	4972.3	1163.7	690.1	844.7	875.6	904.9	957.0	907.4	868.3	916.3	887.8
75°	3858.2	874.8	545.2	656.7	739.7	855.3	926.9	828.4	772.3	767.4	751.9
77.5°	2085.7	600.6	432.1	501.3	587.6	793.4	906.6	743.8	659.2	639.6	627.4
80°	826.0	390.6	314.1	380.0	411.0	703.9	857.7	645.3	543.6	524.1	505.4
82.5°	341.0	231.1	202.6	254.7	267.7	602.2	769.8	529.0	419.9	581.0	616.9
85°	146.5	127.0	120.4	131.8	151.4	422.4	612.8	403.6	453.3	404.5	321.4
87.5°	43.9	53.7	51.3	50.5	55.3	100.9	326.3	224.6	332.8	126.1	94.4
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)