

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: P321099

Luminaire Tested: **GLEON-SA5D-827-U-AFL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321099
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-29)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA5D-827-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29246 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

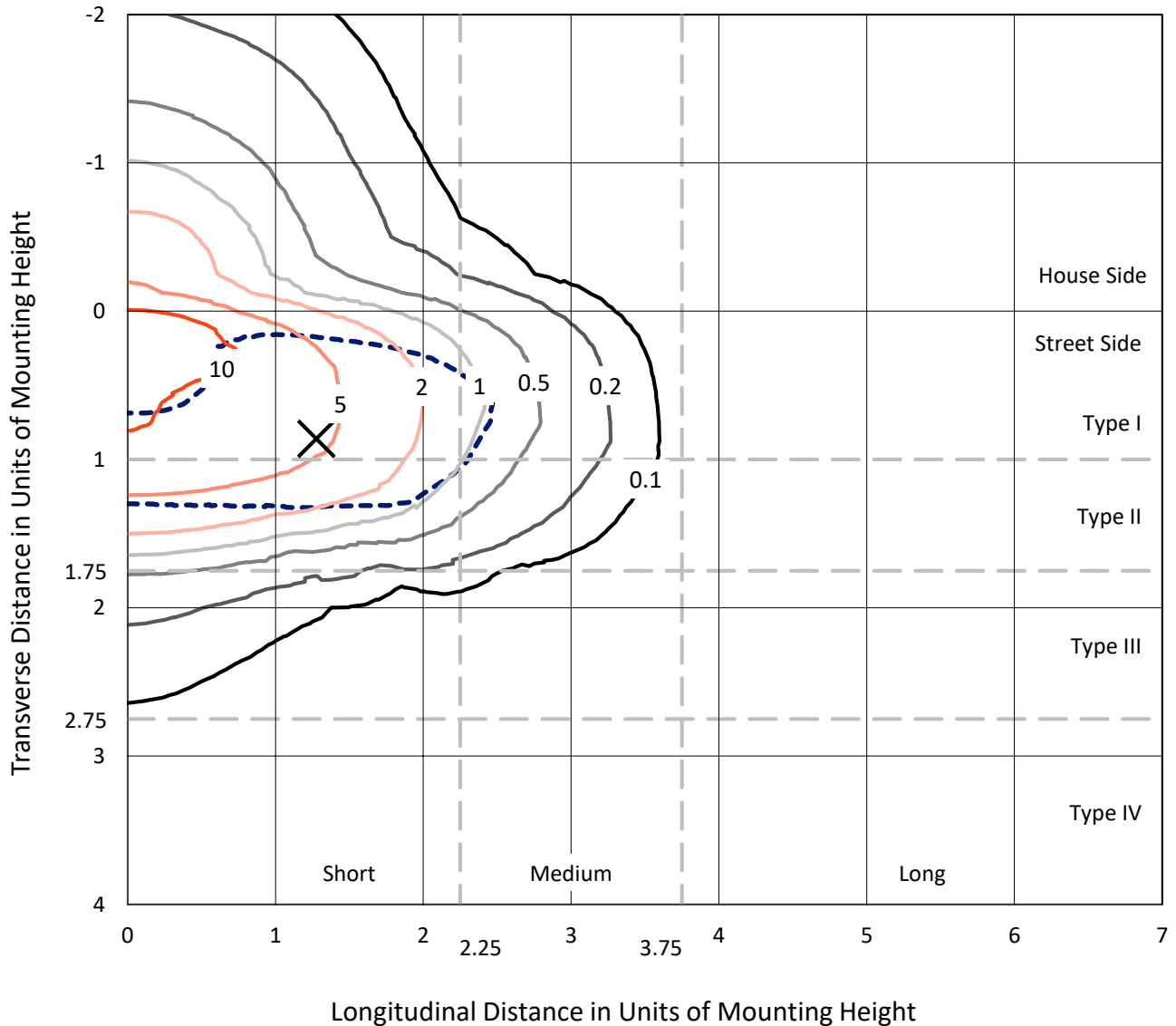
Input Watts (W): 320
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P321099
 CATALOG NUMBER: GLEON-SA5D-827-U-AFL

Iso-Footcandle Lines of Horizontal Illumination

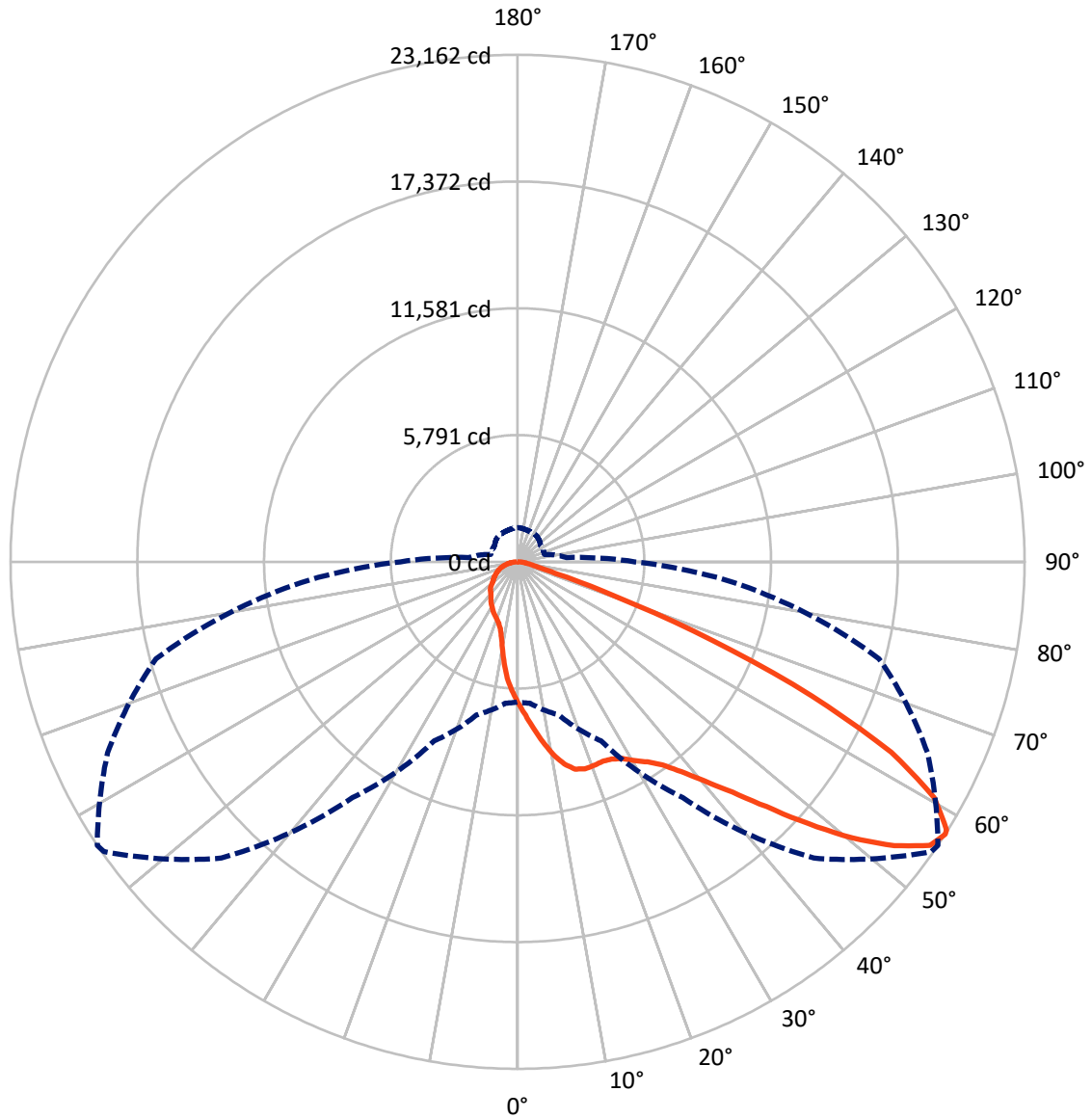
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.4 fc
 Type II - Short - N/A

REPORT NUMBER: P321099
CATALOG NUMBER: GLEON-SA5D-827-U-AFL

Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 57-Deg Vertical



REPORT NUMBER: P321099
 CATALOG NUMBER: GLEON-SA5D-827-U-AFL

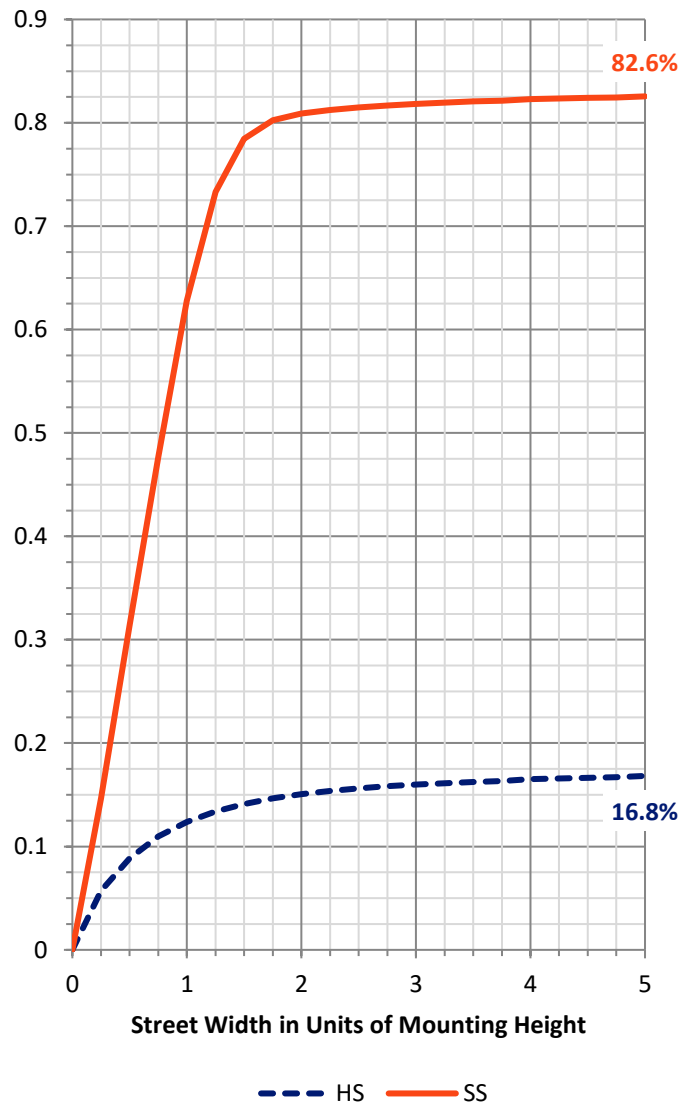
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5041.4	0.0	5041.4
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	24204.6	0.0	24204.6
	% Fixture	82.8	0.0	82.8
Total	Lumens	29246.0	0.0	29246.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	619.7	2.1
10°-20°	1751.9	6.0
20°-30°	2853.5	9.8
30°-40°	4265.7	14.6
40°-50°	6470.1	22.1
50°-60°	7251.9	24.8
60°-70°	4283.2	14.6
70°-80°	1403.4	4.8
80°-90°	346.7	1.2
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°	29246.0	100.0
0°-180°	29246.0	100.0

Coefficient of Utilization



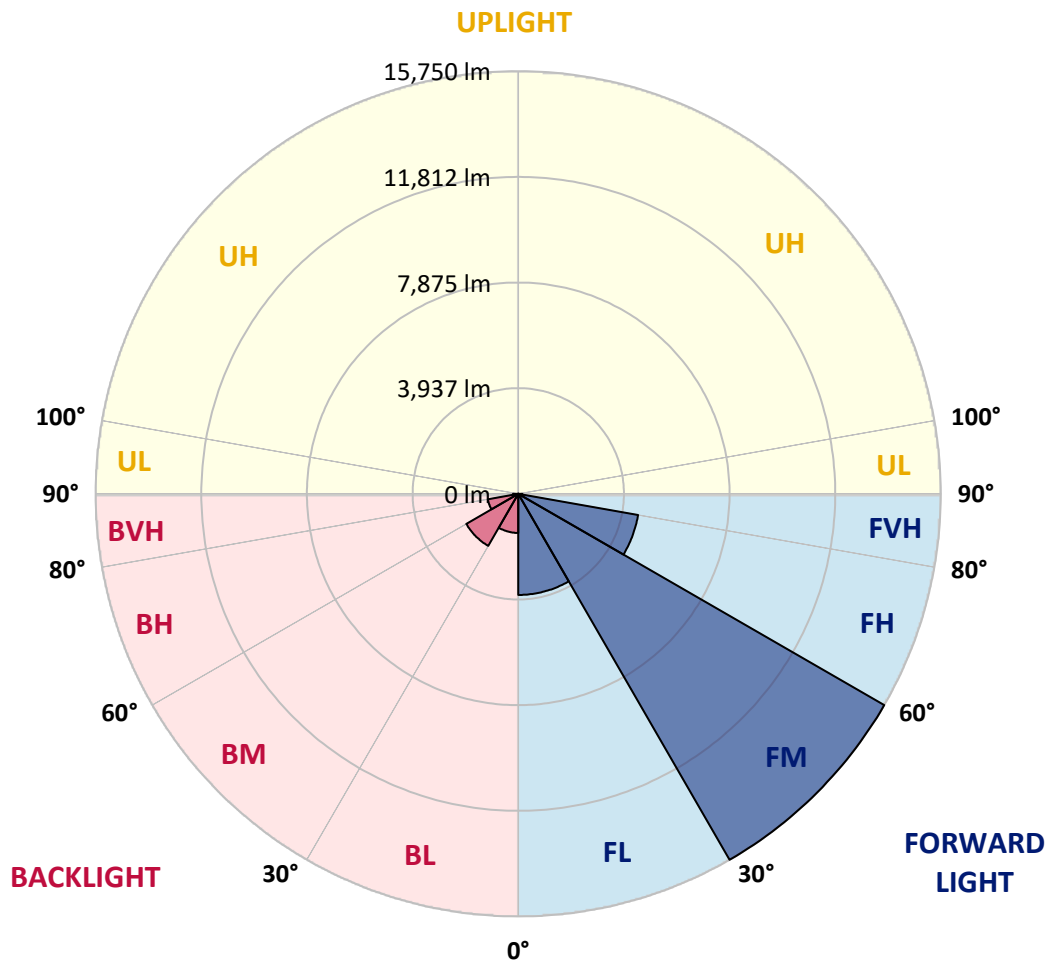
REPORT NUMBER: P321099
 CATALOG NUMBER: GLEON-SA5D-827-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3767.3	12.9			
FM (30°-60°)	15749.9	53.9			
FH (60°-80°)	4534.7	15.5			G2/5000
FVH (80°-90°)	152.7	0.5			G2/225
BL (0°-30°)	1457.7	5.0	B3/2500		
BM (30°-60°)	2237.7	7.7	B2/2500		
BH (60°-80°)	1151.9	3.9	B3/2500		G3/2500
BVH (80°-90°)	194.1	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





REPORT NUMBER: P321099

CATALOG NUMBER: GLEON-SA5D-827-U-AFL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	6486.8	6486.8	6486.8	6486.8	6486.8	6486.8	6486.8	6486.8	6486.8	6486.8	6486.8
2.5°	7448.7	7517.0	7486.8	7382.3	7301.9	7188.3	7061.7	7023.5	6889.8	6740.1	6560.2
5°	8627.6	8593.4	8544.2	8381.4	8209.5	8009.5	7691.9	7641.6	7344.1	7005.4	6647.6
7.5°	9299.0	9296.0	9266.8	9171.4	9014.6	8753.2	8370.3	8311.0	7861.7	7317.0	6762.2
10°	9201.5	9194.5	9242.7	9342.2	9389.5	9335.2	9012.6	8953.3	8401.5	7661.7	6894.9
12.5°	8647.7	8651.7	8729.1	8938.2	9222.6	9564.3	9512.1	9482.9	8961.3	8051.7	7055.7
15°	8216.5	8225.6	8286.9	8468.8	8804.5	9424.6	9815.6	9825.7	9503.0	8481.9	7243.6
17.5°	8027.6	8046.7	8074.8	8202.5	8510.0	9146.2	9888.0	9942.3	9977.4	8928.1	7424.5
20°	8087.9	8106.0	8114.0	8195.4	8447.7	8977.4	9837.7	9935.2	10341.3	9348.3	7605.4
22.5°	8358.2	8369.3	8374.3	8395.4	8591.4	9025.6	9804.6	9907.1	10604.6	9725.2	7742.1
25°	8806.5	8798.5	8766.3	8739.2	8870.8	9216.6	9880.9	9978.4	10818.7	10066.9	7831.6
27.5°	9343.2	9333.2	9270.9	9196.5	9271.9	9514.1	10101.1	10178.5	11010.7	10386.5	7876.8
30°	9987.5	9961.4	9843.8	9755.3	9784.5	9960.3	10463.9	10534.2	11307.2	10749.3	7921.0
32.5°	10732.2	10704.1	10534.2	10387.5	10387.5	10534.2	10837.8	10896.1	11558.4	11159.4	7992.4
35°	11665.0	11629.8	11408.7	11162.4	11093.1	11167.4	11347.4	11388.6	12010.7	11676.0	8122.1
37.5°	12764.5	12717.3	12430.8	12101.2	11949.4	11945.4	12075.0	12159.5	12733.4	12354.4	8342.2
40°	13867.1	13833.9	13583.7	13324.4	13026.8	12931.4	13131.4	13157.5	13678.1	13196.7	8623.6
42.5°	14719.4	14713.4	14667.1	14701.3	14396.8	14203.8	14360.6	14381.7	14832.0	14108.3	8923.1
45°	15169.7	15179.7	15403.9	15900.4	16012.9	15872.2	15949.6	15955.7	16150.6	15028.0	9197.5
47.5°	14808.9	14861.1	15428.0	16538.6	17460.3	17927.6	17799.0	17873.3	17429.1	15818.0	9412.6
50°	13402.7	13467.1	14432.0	16254.2	18135.7	19916.7	19849.3	19832.2	18460.3	16396.9	9529.2
52.5°	11660.9	11711.2	12507.2	14775.7	17640.2	21016.2	21634.4	21545.9	19376.9	16830.1	9551.3
55°	9008.5	9086.9	9849.8	11824.8	15636.0	20596.1	22947.0	22867.6	20212.2	17057.2	9525.1
57°	6404.4	6486.8	7244.6	9024.6	13153.5	19141.8	23077.7	23162.1	20663.4	17095.4	9554.3
57.5°	5714.9	5799.3	6550.1	8278.8	12379.6	18616.1	22965.1	23105.8	20744.9	17089.4	9570.4
60°	2877.5	2909.7	3388.1	4621.4	7825.6	15050.1	21496.7	21859.5	20818.2	16793.9	9639.7
62.5°	1789.0	1765.9	1750.9	2128.8	3807.2	9980.4	18466.3	19164.9	19414.1	16078.3	9471.9
65°	1573.0	1529.7	1363.9	1333.7	1681.5	4847.5	13906.3	14775.7	16414.0	14950.6	9071.9
67.5°	1477.5	1435.3	1248.3	1135.7	1136.7	1921.7	8633.6	9612.6	12786.6	13043.9	8128.1
70°	1379.0	1340.8	1165.9	1033.2	967.9	1064.4	3972.1	4714.8	8335.1	10252.8	6793.3
72.5°	1252.3	1226.2	1060.4	923.7	854.3	797.0	1520.7	1796.1	4825.4	6885.8	4717.8
75°	1119.7	1095.5	953.8	823.2	738.7	627.2	856.3	922.7	2451.4	3522.8	2322.7
77.5°	973.9	959.9	848.3	727.7	660.3	519.6	606.1	638.2	1051.3	1510.6	1164.9
80°	774.9	802.1	741.7	648.3	586.0	416.1	429.2	450.3	612.1	737.7	661.3
82.5°	504.6	551.8	580.9	526.7	482.4	327.7	308.6	317.6	399.0	450.3	287.5
85°	210.1	236.2	381.9	344.7	320.6	239.2	207.0	211.1	247.2	256.3	117.6
87.5°	93.5	99.5	167.8	157.8	135.7	82.4	88.4	96.5	131.7	124.6	45.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P321099
 CATALOG NUMBER: GLEON-SA5D-827-U-AFL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6486.8	6486.8	6486.8	6486.8	6486.8	6486.8	6486.8	6486.8	6486.8	6486.8	6486.8
2.5°	6492.8	6408.4	6263.7	6103.9	5973.2	5868.7	5763.1	5690.8	5606.3	5561.1	5538.0
5°	6497.8	6332.0	6027.5	5714.9	5435.5	5180.2	4937.0	4750.0	4575.1	4480.6	4454.5
7.5°	6519.0	6269.7	5777.2	5262.6	4766.1	4312.8	3963.0	3743.9	3586.1	3515.8	3495.7
10°	6536.0	6196.3	5467.6	4705.8	4030.4	3571.1	3299.7	3177.1	3122.8	3113.7	3104.7
12.5°	6576.2	6120.9	5142.0	4124.9	3458.5	3140.9	3046.4	3038.4	3053.4	3075.5	3075.5
15°	6639.6	6046.6	4770.1	3626.3	3094.6	2983.1	3002.2	3046.4	3087.6	3121.8	3126.8
17.5°	6685.8	5955.1	4370.1	3227.3	2900.7	2930.8	2999.2	3061.5	3103.7	3136.9	3139.9
20°	6719.0	5813.4	3942.9	2922.8	2789.1	2882.6	2968.0	3023.3	3052.4	3085.6	3090.6
22.5°	6701.9	5623.4	3564.0	2704.7	2698.6	2812.2	2893.6	2960.0	2937.9	2905.7	2926.8
25°	6619.5	5362.1	3174.0	2541.8	2603.2	2717.7	2818.2	2774.0	2699.6	2685.6	2693.6
27.5°	6472.7	5028.4	2813.2	2391.1	2492.6	2630.3	2624.3	2580.0	2553.9	2535.8	2546.9
30°	6314.9	4666.6	2497.6	2259.4	2370.0	2483.6	2460.4	2459.4	2433.3	2404.2	2418.2
32.5°	6159.1	4302.7	2247.4	2150.9	2277.5	2292.6	2342.8	2357.9	2306.7	2245.3	2241.3
35°	6023.4	3959.0	2057.4	2052.4	2165.9	2168.0	2241.3	2220.2	2092.6	2029.3	2029.3
37.5°	5921.9	3616.3	1912.7	1963.9	2019.2	2071.5	2108.7	2021.2	2000.1	1964.9	1963.9
40°	5877.7	3314.8	1822.2	1896.6	1915.7	1982.0	1886.5	1920.7	1930.8	1912.7	1912.7
42.5°	5831.5	3052.4	1743.8	1845.3	1842.3	1833.3	1785.0	1829.2	1869.4	1870.5	1867.4
45°	5785.2	2826.3	1674.5	1735.8	1778.0	1680.5	1689.5	1736.8	1793.1	1813.2	1813.2
47.5°	5734.0	2647.4	1611.1	1620.2	1685.5	1620.2	1613.2	1649.3	1715.7	1747.8	1754.9
50°	5621.4	2486.6	1538.8	1518.7	1536.8	1558.9	1564.9	1582.0	1655.4	1706.6	1718.7
52.5°	5465.6	2342.8	1446.3	1425.2	1425.2	1508.6	1536.8	1541.8	1604.1	1665.4	1677.5
55°	5336.0	2251.4	1350.8	1346.8	1342.8	1455.4	1503.6	1511.6	1554.9	1603.1	1609.1
57°	5345.0	2244.3	1277.5	1281.5	1280.5	1401.1	1472.4	1489.5	1511.6	1552.8	1559.9
57.5°	5350.0	2249.4	1261.4	1263.4	1262.4	1386.0	1463.4	1482.5	1499.6	1542.8	1549.8
60°	5425.4	2262.4	1196.0	1173.9	1179.0	1305.6	1412.1	1436.3	1447.3	1504.6	1513.7
62.5°	5313.9	2204.1	1143.8	1090.5	1090.5	1221.2	1340.8	1379.0	1396.1	1473.4	1488.5
65°	4990.2	2040.3	1082.5	996.0	1006.1	1136.7	1255.3	1317.7	1343.8	1440.3	1456.4
67.5°	4490.7	1850.4	1017.1	911.6	921.7	1048.3	1166.9	1234.2	1275.4	1404.1	1417.2
70°	3840.4	1618.2	928.7	822.2	834.2	951.8	1062.4	1138.8	1200.1	1369.9	1373.9
72.5°	2831.3	1326.7	805.1	723.7	736.7	839.2	956.8	1045.3	1127.7	1284.5	1282.5
75°	1683.5	1037.2	668.4	624.2	633.2	728.7	861.4	968.9	1092.5	1251.3	1270.4
77.5°	1021.2	780.9	544.8	522.6	533.7	631.2	793.0	907.6	1077.4	1180.0	1173.9
80°	617.1	557.8	435.2	421.1	432.2	539.7	733.7	861.4	941.8	1008.1	1008.1
82.5°	322.6	340.7	319.6	308.6	323.6	438.2	667.4	751.8	832.2	714.6	667.4
85°	131.7	177.9	194.0	193.0	202.0	303.5	575.9	643.3	536.7	509.6	521.6
87.5°	44.2	75.4	94.5	81.4	85.4	191.0	399.0	310.6	368.9	257.3	244.2
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)