

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: P651866

Luminaire Tested: **GALN-SA4A-840-U-T3R-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651866
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4A-840-U-T3R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11911.9 lumens
Efficiency: N/A
Efficacy: 98.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

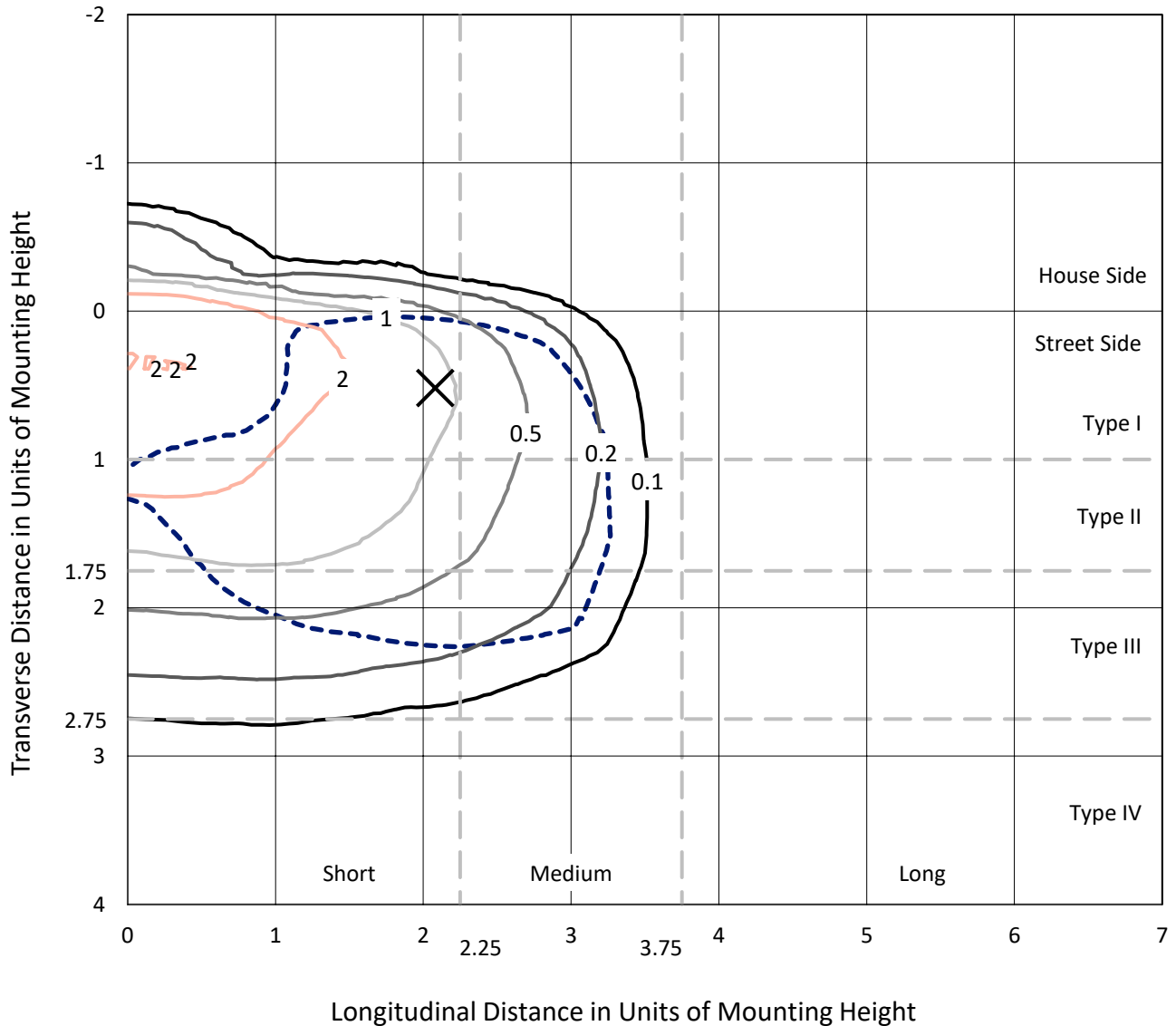
Input Watts (W): 121
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P651866
 CATALOG NUMBER: GALN-SA4A-840-U-T3R-HSS

Iso-Footcandle Lines of Horizontal Illumination

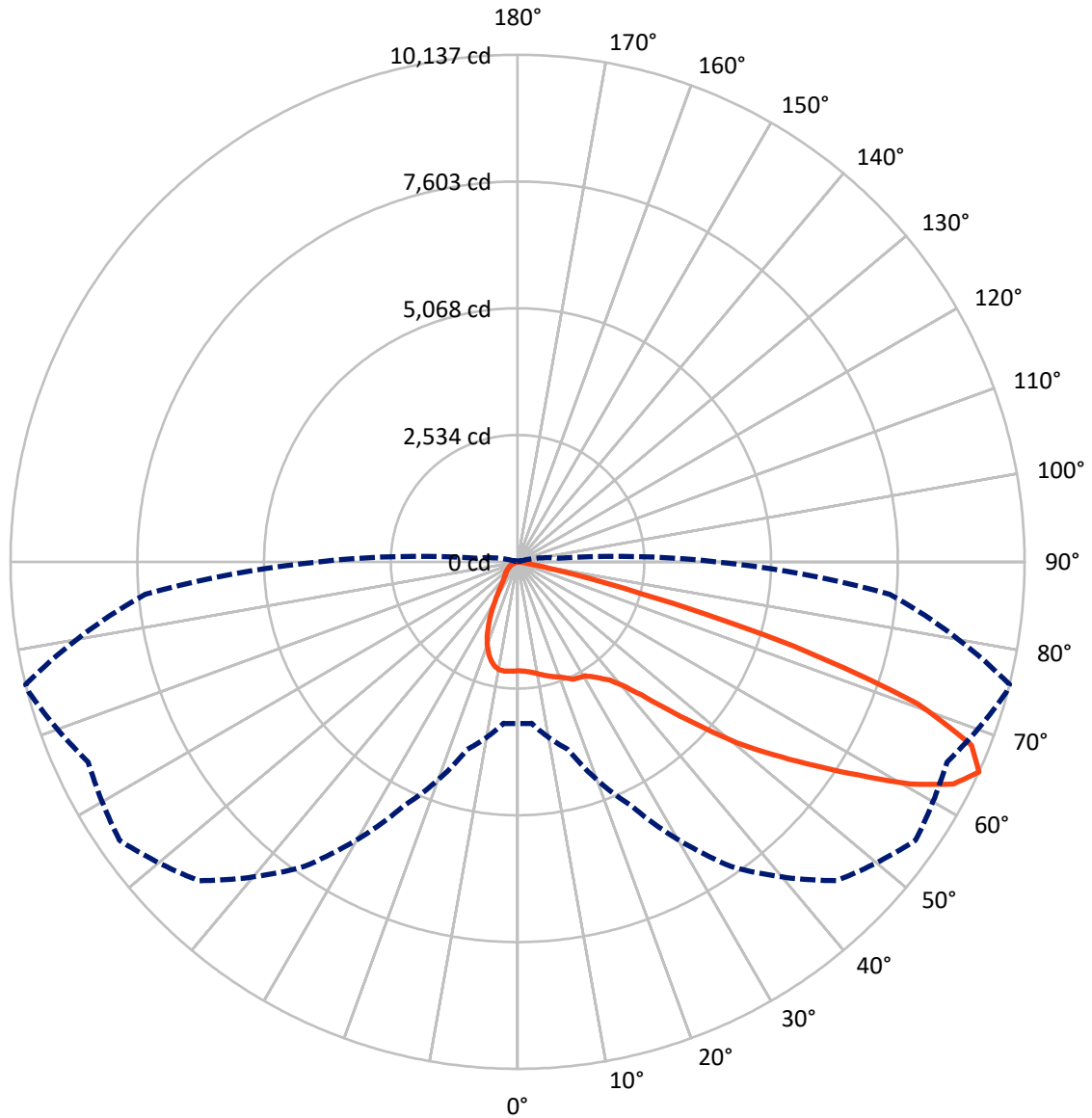
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type III - Short - N/A

REPORT NUMBER: P651866
CATALOG NUMBER: GALN-SA4A-840-U-T3R-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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 CATALOG NUMBER: GALN-SA4A-840-U-T3R-HSS

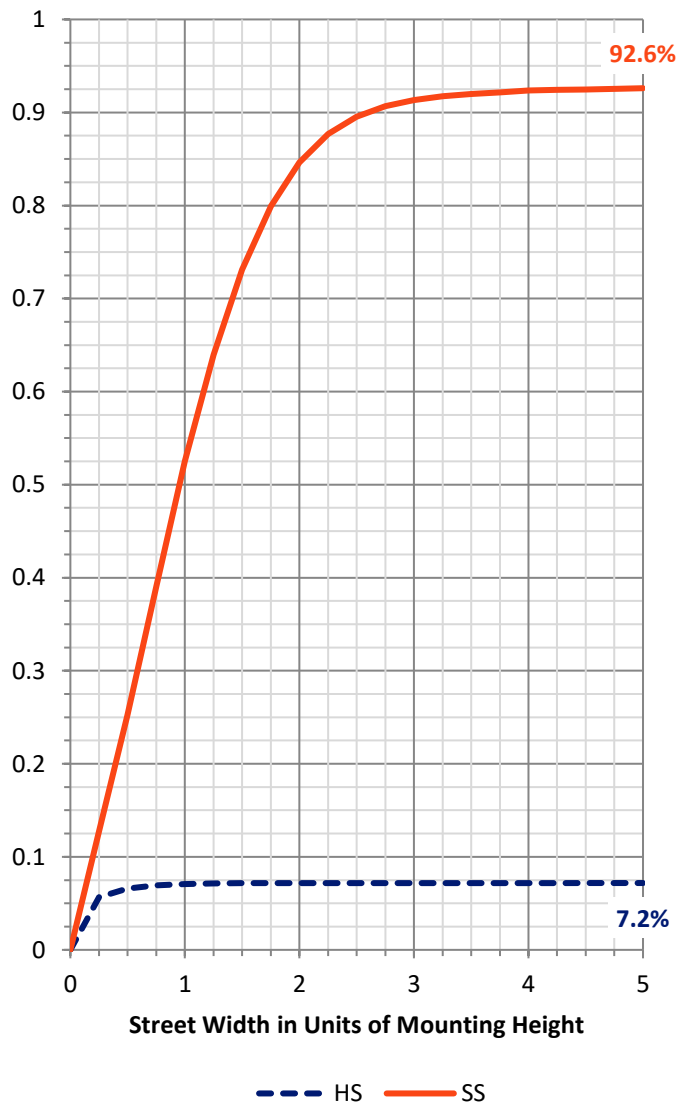
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	860.3	0.0	860.3
	% Fixture	7.2	0.0	7.2
Street Side	Lumens	11051.6	0.0	11051.6
	% Fixture	92.8	0.0	92.8
Total	Lumens	11911.9	0.0	11911.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.5	1.5
10°-20°	399.7	3.4
20°-30°	644.0	5.4
30°-40°	1119.8	9.4
40°-50°	1850.5	15.5
50°-60°	2858.6	24.0
60°-70°	3490.8	29.3
70°-80°	1324.8	11.1
80°-90°	44.2	0.4
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°	11911.9	100.0
0°-180°	11911.9	100.0

Coefficient of Utilization



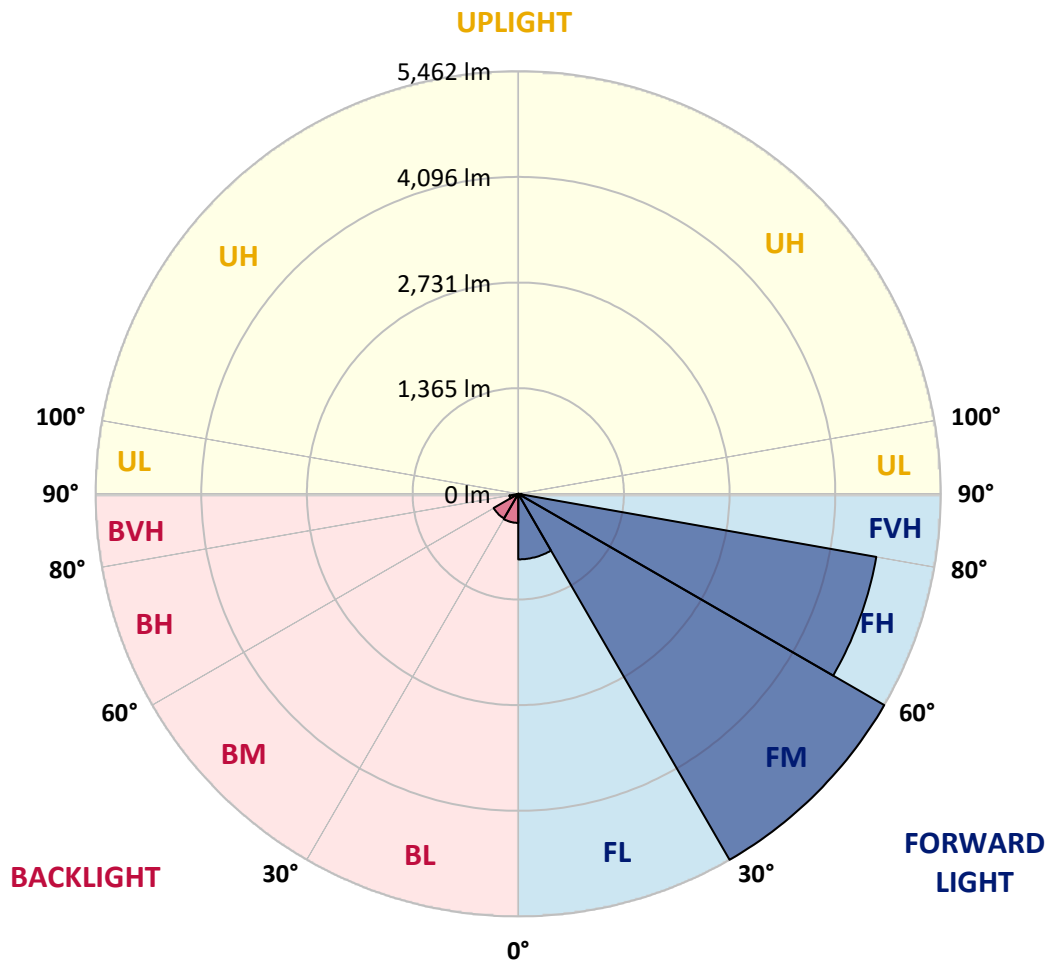
REPORT NUMBER: P651866
 CATALOG NUMBER: GALN-SA4A-840-U-T3R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	847.4	7.1			
FM (30°-60°)	5461.8	45.9			
FH (60°-80°)	4698.8	39.4			G2/5000
FVH (80°-90°)	43.6	0.4			G1/100
BL (0°-30°)	375.8	3.2	B1/500		
BM (30°-60°)	367.1	3.1	B1/1000		
BH (60°-80°)	116.7	1.0	B1/500		G1/500
BVH (80°-90°)	0.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





REPORT NUMBER: P651866

CATALOG NUMBER: GALN-SA4A-840-U-T3R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2179.0	2179.0	2179.0	2179.0	2179.0	2179.0	2179.0	2179.0	2179.0	2179.0	2179.0
2.5°	2082.3	2083.2	2088.2	2100.8	2120.2	2136.1	2149.6	2171.5	2186.6	2188.3	2193.3
5°	1938.5	1928.4	1938.5	1971.3	2000.7	2045.3	2100.0	2154.6	2203.4	2206.8	2230.3
7.5°	1777.0	1785.4	1801.4	1835.1	1890.6	1958.7	2037.7	2135.3	2227.8	2236.2	2282.5
10°	1613.0	1631.5	1657.6	1708.9	1786.3	1874.6	1982.2	2121.8	2266.5	2278.3	2358.2
12.5°	1461.7	1470.1	1502.0	1571.0	1666.9	1791.3	1940.2	2114.3	2309.5	2323.8	2439.0
15°	1345.6	1356.5	1384.3	1446.5	1553.3	1713.1	1905.7	2111.8	2351.5	2371.7	2519.7
17.5°	1323.7	1330.5	1342.2	1384.3	1477.6	1650.9	1874.6	2110.9	2391.9	2416.3	2594.6
20°	1413.7	1407.8	1396.1	1391.9	1443.2	1602.9	1851.9	2117.6	2430.6	2458.3	2673.6
22.5°	1639.1	1646.7	1577.7	1496.1	1479.3	1595.4	1848.5	2149.6	2492.0	2524.8	2761.9
25°	2117.6	2059.6	1952.0	1756.8	1609.7	1641.6	1886.4	2225.3	2563.5	2599.6	2841.8
27.5°	2646.7	2629.1	2461.7	2140.3	1866.2	1739.2	1953.6	2283.3	2587.0	2624.0	2887.2
30°	3166.4	3187.5	2995.7	2640.8	2238.7	1920.0	2016.7	2305.3	2608.0	2646.7	2945.3
32.5°	3648.3	3673.6	3505.4	3153.8	2677.8	2232.9	2125.2	2390.2	2696.3	2735.9	3042.0
35°	4027.6	4031.0	3904.0	3624.0	3157.2	2613.1	2359.9	2539.1	2815.8	2862.0	3144.6
37.5°	4375.8	4370.8	4221.9	3980.5	3556.7	2990.7	2655.1	2710.6	2952.0	2999.9	3292.6
40°	4634.0	4637.4	4589.4	4362.4	3929.2	3339.7	2888.9	2871.3	3180.7	3255.6	3507.9
42.5°	4806.4	4837.5	4861.1	4745.8	4397.7	3769.4	3248.0	3215.2	3577.7	3639.9	3812.3
45°	4946.0	5001.5	5119.3	5113.4	4847.6	4296.8	3740.9	3673.6	4140.3	4206.8	4200.0
47.5°	5047.8	5104.1	5299.2	5417.0	5270.6	4808.1	4360.7	4302.6	4812.3	4884.6	4628.1
50°	5099.9	5167.2	5416.1	5644.0	5601.1	5300.9	5067.1	5070.5	5623.9	5693.7	5124.3
52.5°	4978.0	5065.4	5478.4	5888.8	5972.0	5772.7	5729.0	5840.0	6346.3	6406.0	5572.6
55°	4588.6	4698.8	5393.4	6097.3	6401.8	6329.5	6480.8	6649.9	7136.1	7174.7	6032.6
57.5°	4342.2	4459.1	5142.8	6274.8	6918.2	7029.2	7268.9	7392.6	7951.0	8049.4	6560.7
60°	4134.4	4226.1	4936.8	6312.6	7443.0	7885.4	8118.3	8246.2	8956.8	9020.7	7141.9
62.5°	3788.8	3893.9	4588.6	6048.6	7707.1	8570.8	9053.5	8996.3	9734.7	9779.3	7498.5
65°	3232.9	3242.1	3882.1	5385.0	7434.6	9015.7	9710.4	9470.7	10106.5	10136.7	7470.8
67.5°	2412.9	2502.1	2986.5	4232.8	6279.8	8635.6	9923.1	9483.3	9871.8	9787.7	6877.9
70°	1554.2	1622.3	2024.3	2935.2	4528.0	7206.7	9217.5	8833.2	8664.2	8477.4	5629.7
72.5°	717.4	804.8	1202.6	1677.0	2685.4	5133.5	7482.5	7176.4	6236.1	5775.2	3578.5
75°	312.9	334.7	593.7	884.7	1259.0	2714.8	4933.4	4454.9	2816.6	2572.7	1432.2
77.5°	190.9	205.2	311.2	474.3	494.5	1034.4	2657.6	1943.6	870.4	767.8	388.5
80°	129.5	145.5	226.2	248.1	169.0	288.5	997.4	518.9	175.8	168.2	83.3
82.5°	63.1	79.9	167.4	138.8	73.2	92.5	290.1	111.0	51.3	47.9	29.4
85°	9.3	16.0	94.2	90.8	32.8	21.9	51.3	27.8	17.7	16.8	13.5
87.5°	0.0	0.0	32.0	14.3	3.4	3.4	5.9	5.9	6.7	5.9	6.7
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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CATALOG NUMBER: GALN-SA4A-840-U-T3R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2179.0	2179.0	2179.0	2179.0	2179.0	2179.0	2179.0	2179.0	2179.0	2179.0	2179.0
2.5°	2195.9	2200.1	2184.1	2161.4	2137.0	2112.6	2078.1	2047.0	2028.5	2039.4	2012.5
5°	2235.4	2232.0	2190.0	2121.0	2029.3	1919.2	1809.8	1716.5	1686.2	1640.8	1635.7
7.5°	2290.1	2280.8	2191.6	2033.5	1826.7	1619.8	1417.9	1284.2	1207.7	1142.9	1144.6
10°	2366.7	2339.7	2172.3	1879.6	1539.0	1227.0	969.7	793.1	716.5	692.1	672.8
12.5°	2445.7	2393.6	2118.5	1671.9	1198.4	838.5	589.5	481.9	434.8	419.7	418.0
15°	2516.4	2433.9	2024.3	1422.1	871.3	535.7	402.0	366.7	360.8	361.6	360.8
17.5°	2586.2	2465.9	1893.9	1157.2	592.1	384.3	345.7	337.2	339.8	343.1	342.3
20°	2644.2	2472.6	1727.4	883.0	418.8	337.2	324.6	322.9	325.5	328.0	328.0
22.5°	2707.3	2477.7	1529.8	611.4	342.3	313.7	307.0	307.0	310.3	313.7	314.5
25°	2754.4	2449.9	1293.5	439.0	301.9	291.0	287.6	288.5	291.8	293.5	292.7
27.5°	2761.9	2371.7	1042.8	336.4	274.2	263.2	259.9	263.2	259.0	261.6	259.9
30°	2768.7	2272.4	788.9	283.4	248.9	232.1	227.1	222.0	218.7	214.5	213.6
32.5°	2789.7	2155.5	576.1	254.8	225.4	206.9	195.1	180.8	169.9	166.5	165.7
35°	2798.9	2015.0	423.0	232.1	204.4	184.2	163.2	143.0	127.0	121.1	125.3
37.5°	2834.3	1878.8	328.0	215.3	185.9	160.6	133.7	108.5	93.4	90.0	91.7
40°	2906.6	1730.8	275.0	201.0	169.9	138.8	106.0	81.6	71.5	68.1	67.3
42.5°	3022.6	1583.6	244.7	187.5	153.9	116.9	83.3	63.9	55.5	53.0	53.0
45°	3163.9	1442.3	223.7	173.2	137.1	94.2	65.6	51.3	46.3	44.6	44.6
47.5°	3349.8	1318.7	206.0	158.9	118.6	74.8	53.0	44.6	41.2	42.0	42.9
50°	3538.2	1227.0	186.7	143.0	97.6	61.4	45.4	39.5	38.7	39.5	39.5
52.5°	3680.3	1173.2	160.6	121.1	76.5	51.3	40.4	37.0	36.2	34.5	34.5
55°	3872.0	1161.4	127.8	98.4	60.6	42.9	36.2	33.6	31.1	29.4	28.6
57.5°	4118.5	1174.9	98.4	76.5	47.1	35.3	32.0	27.8	24.4	21.0	21.0
60°	4271.5	1144.6	76.5	58.9	34.5	28.6	24.4	20.2	16.0	13.5	12.6
62.5°	4222.7	1016.8	60.6	43.7	24.4	21.0	16.0	13.5	9.3	6.7	5.9
65°	3971.3	820.8	48.8	30.3	17.7	12.6	8.4	8.4	4.2	0.8	0.0
67.5°	3475.9	608.0	38.7	20.2	10.1	5.9	4.2	2.5	0.0	0.0	0.0
70°	2829.2	439.0	30.3	12.6	5.9	4.2	1.7	0.8	0.0	0.0	0.0
72.5°	1796.4	251.5	23.5	7.6	4.2	1.7	0.0	0.0	0.0	0.0	0.0
75°	694.7	98.4	16.0	5.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	196.8	46.3	9.3	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	51.3	20.2	5.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	24.4	8.4	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.3	3.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)