

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: P453368

Luminaire Tested: **GALN-SA4B-827-U-T2-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453368
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-11)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4B-827-U-T2-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12370 lumens
Efficiency: N/A
Efficacy: 75.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

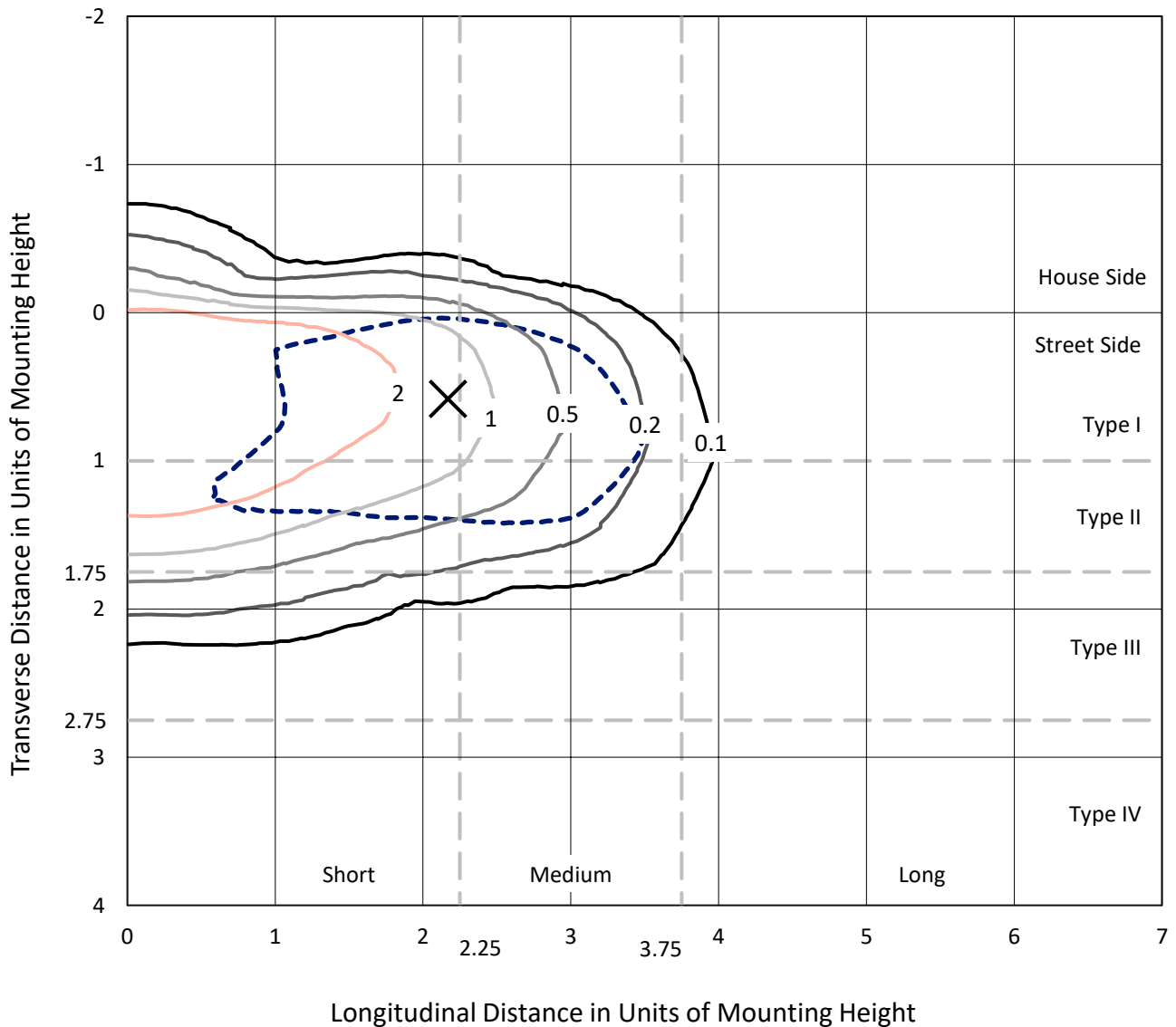
Input Watts (W): 164
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

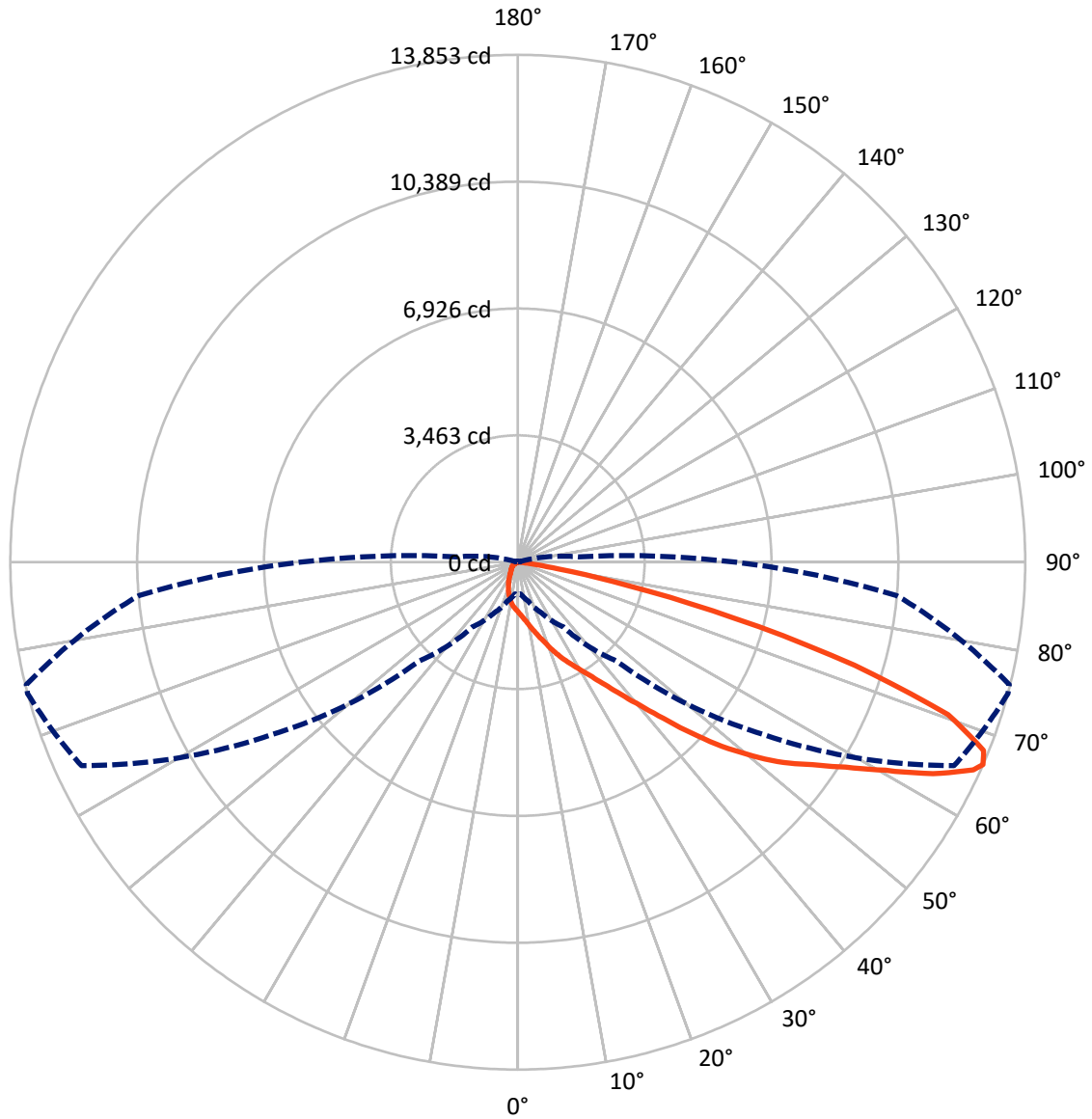
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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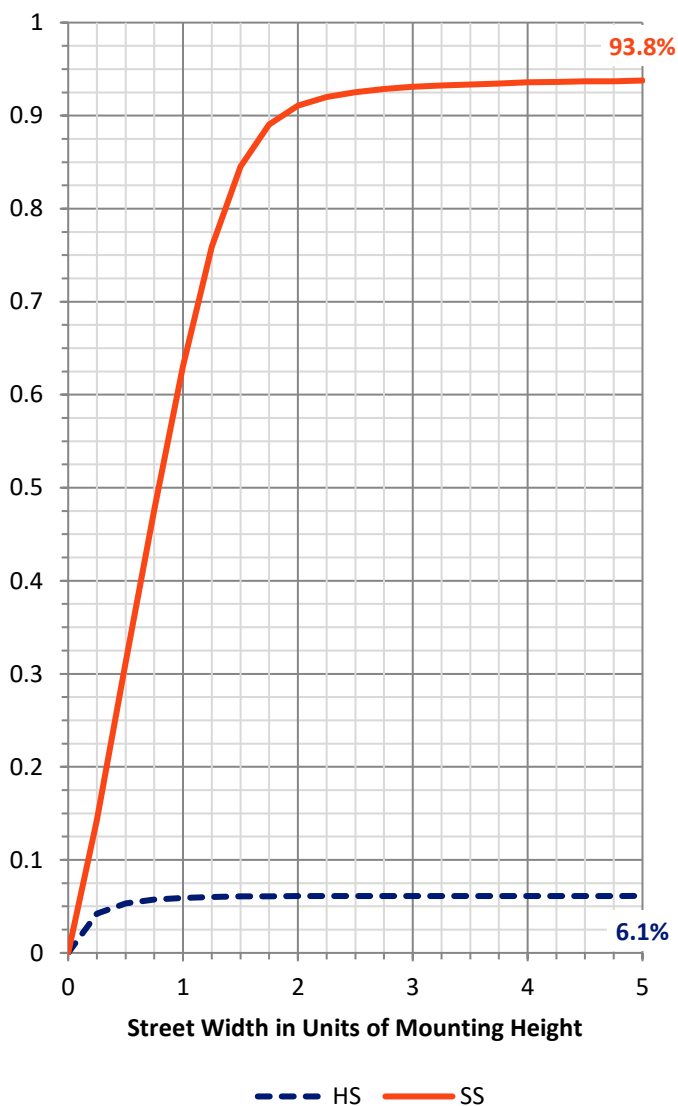
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	763.7	0.0	763.7
	% Fixture	6.2	0.0	6.2
Street Side	Lumens	11606.3	0.0	11606.3
	% Fixture	93.8	0.0	93.8
Total	Lumens	12370.0	0.0	12370.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.5	1.1
10°-20°	384.0	3.1
20°-30°	663.1	5.4
30°-40°	1196.1	9.7
40°-50°	2160.7	17.5
50°-60°	3368.6	27.2
60°-70°	3200.0	25.9
70°-80°	1199.3	9.7
80°-90°	67.7	0.5
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°	12370.0	100.0
0°-180°	12370.0	100.0

Coefficient of Utilization



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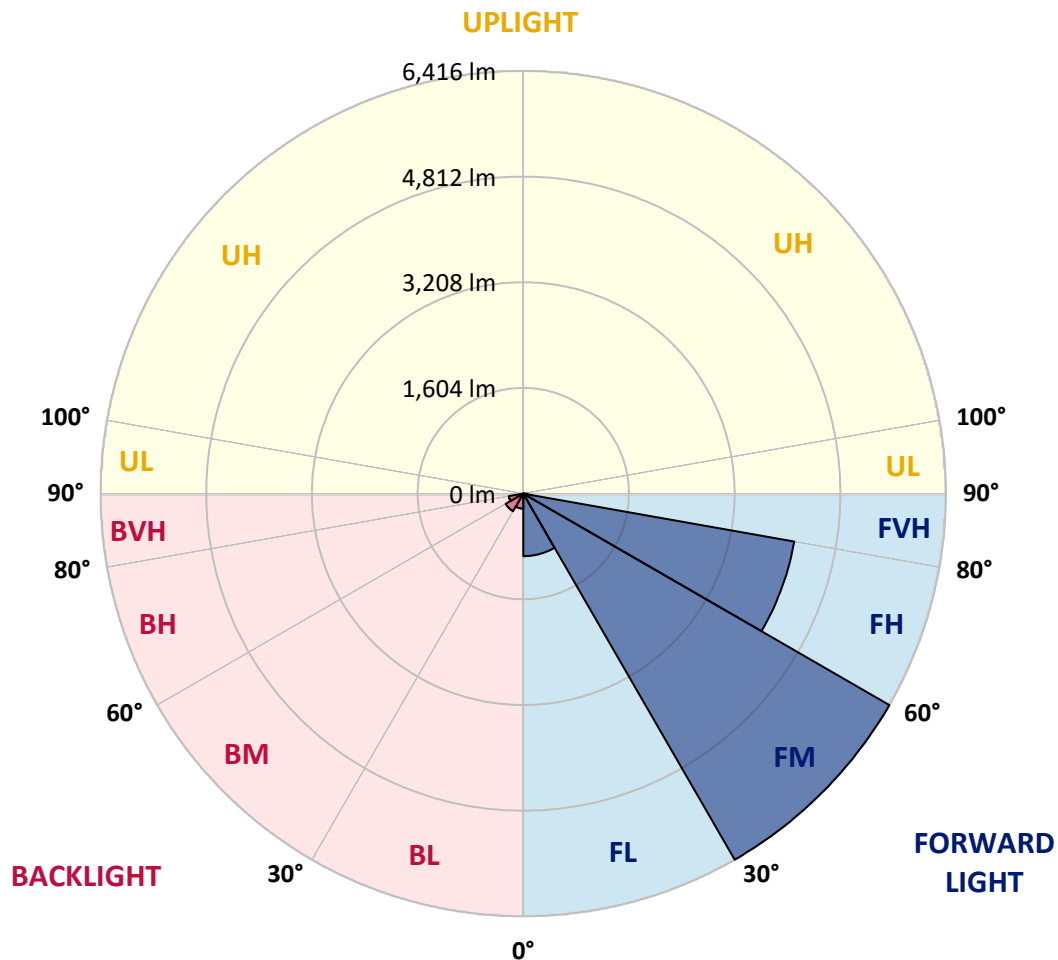
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	949.5	7.7			
FM (30°-60°)	6416.3	51.9			
FH (60°-80°)	4176.3	33.8			G2/5000
FVH (80°-90°)	64.2	0.5			G1/100
BL (0°-30°)	228.1	1.8	B1/500		
BM (30°-60°)	309.1	2.5	B1/1000		
BH (60°-80°)	223.0	1.8	B1/500		G1/500
BVH (80°-90°)	3.5	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1352.8	1352.8	1352.8	1352.8	1352.8	1352.8	1352.8	1352.8	1352.8	1352.8	1352.8
2.5°	1616.2	1596.1	1602.5	1593.3	1572.3	1541.2	1513.8	1474.4	1435.1	1428.7	1384.8
5°	1829.3	1823.8	1816.5	1790.0	1775.4	1727.8	1671.1	1603.4	1522.0	1507.4	1427.8
7.5°	1974.8	1972.0	1975.7	1961.9	1949.1	1906.2	1845.8	1753.4	1627.2	1618.9	1486.3
10°	2022.3	2029.6	2043.3	2065.3	2085.4	2071.7	2026.0	1910.7	1763.5	1739.7	1553.1
12.5°	1994.9	2003.1	2036.0	2094.6	2159.5	2197.0	2178.7	2094.6	1908.0	1888.8	1628.1
15°	1924.4	1934.5	1981.2	2071.7	2187.9	2294.0	2339.7	2279.3	2076.3	2045.2	1718.6
17.5°	1820.2	1834.8	1901.6	2021.4	2180.5	2363.5	2492.4	2472.3	2255.6	2226.3	1817.4
20°	1741.5	1752.5	1809.2	1946.4	2149.5	2401.9	2637.9	2694.6	2476.9	2426.6	1933.6
22.5°	1793.6	1797.3	1816.5	1898.8	2093.7	2412.0	2765.9	2926.0	2712.0	2667.1	2054.3
25°	2048.8	2012.3	1993.0	1974.8	2081.8	2402.8	2882.1	3167.5	2946.1	2898.6	2174.1
27.5°	2451.3	2434.8	2337.9	2208.0	2183.3	2414.7	2958.9	3396.1	3166.6	3115.3	2291.2
30°	2889.4	2861.1	2801.6	2611.4	2420.2	2498.9	3014.7	3618.4	3427.2	3359.5	2398.2
32.5°	3291.9	3310.2	3221.4	3025.7	2804.3	2678.1	3087.0	3860.8	3726.3	3642.2	2522.6
35°	3761.1	3797.7	3661.4	3473.9	3215.0	3001.9	3227.8	4134.3	4105.9	3999.8	2714.7
37.5°	4237.6	4259.6	4176.3	3912.9	3679.7	3413.5	3493.1	4471.8	4573.3	4482.7	2944.3
40°	4638.2	4668.4	4607.1	4373.0	4124.2	3890.0	3878.2	4839.5	5129.4	5036.1	3286.4
42.5°	4944.7	4967.5	4969.3	4803.8	4579.7	4473.6	4369.3	5308.7	5826.4	5718.5	3683.3
45°	5331.6	5364.5	5345.3	5232.8	5065.4	5046.2	4992.2	5875.8	6660.6	6524.3	4198.3
47.5°	5929.7	5951.7	5904.1	5771.5	5601.4	5631.6	5599.5	6511.5	7511.2	7394.1	4731.5
50°	6345.0	6381.6	6449.3	6502.3	6378.8	6267.2	6172.1	7105.1	8318.8	8213.6	5276.7
52.5°	6340.4	6400.8	6614.8	6881.9	7151.7	7117.9	6844.4	7760.9	9089.9	8960.0	5788.9
55°	5913.3	6030.4	6345.0	6818.8	7566.1	7938.3	7813.9	8520.1	9755.8	9668.0	6382.5
57.5°	5031.5	5102.9	5540.1	6202.3	7334.7	8324.3	8937.1	9549.0	10554.3	10513.1	7304.5
60°	3384.2	3416.3	3978.8	4797.4	6244.4	7939.2	9760.3	10793.9	11537.5	11517.4	8381.0
62.5°	1939.1	1952.8	2360.7	3051.3	4443.4	6728.2	9829.8	12329.6	12716.5	12727.5	9626.8
65°	1043.6	1050.9	1380.2	1790.9	2703.7	4795.6	8839.3	13171.1	13669.6	13690.6	10398.8
66°	900.9	866.2	1098.5	1526.6	2151.3	3816.9	8212.7	13140.9	13852.5	13829.7	10371.3
67.5°	685.1	716.2	877.2	1173.5	1594.3	2713.8	6780.4	12556.4	13713.5	13642.2	9949.7
70°	490.3	503.1	624.7	836.9	1085.7	1489.1	4332.7	10429.0	12464.1	12368.0	8668.2
72.5°	316.5	330.2	442.7	605.5	784.8	813.1	2425.7	7535.0	9609.4	9595.7	6527.9
75°	225.9	238.7	292.7	433.5	590.0	503.1	1168.0	5078.2	6109.0	6067.9	4038.2
77.5°	163.7	170.1	195.7	283.5	421.7	360.4	541.5	2712.0	3041.2	3184.8	1784.5
80°	94.2	99.7	136.3	172.9	285.4	246.0	258.8	1088.4	1122.3	1068.3	557.9
82.5°	46.6	53.1	81.4	118.0	178.4	165.6	118.9	327.4	345.7	336.6	140.9
85°	11.0	13.7	45.7	77.7	86.9	74.1	57.6	96.0	118.9	116.2	54.0
87.5°	0.9	1.8	16.5	13.7	14.6	24.7	20.1	24.7	38.4	35.7	19.2
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°	1352.8	1352.8	1352.8	1352.8	1352.8	1352.8	1352.8	1352.8	1352.8	1352.8	1352.8
2.5°	1364.7	1347.3	1297.0	1247.6	1206.4	1163.4	1124.1	1101.3	1092.1	1082.0	1086.6
5°	1383.9	1341.8	1240.3	1152.5	1066.5	993.3	934.8	897.3	879.0	876.2	871.7
7.5°	1409.5	1337.2	1179.9	1042.7	930.2	848.8	782.0	728.1	711.6	697.0	685.1
10°	1440.6	1329.0	1104.9	927.5	807.6	705.2	617.4	553.4	520.4	511.3	517.7
12.5°	1473.5	1313.5	1026.2	821.4	683.3	552.5	471.0	439.0	429.9	426.2	427.1
15°	1506.4	1294.2	943.9	718.9	544.2	440.9	403.4	395.1	391.5	389.6	387.8
17.5°	1536.6	1263.1	851.5	619.2	440.9	376.8	363.1	355.8	348.5	345.7	341.2
20°	1572.3	1227.5	768.3	507.6	373.2	341.2	324.7	311.0	300.0	292.7	291.8
22.5°	1606.1	1181.7	681.4	420.7	340.3	306.4	279.9	265.3	252.4	243.3	246.0
25°	1624.4	1125.9	603.7	366.8	310.1	271.7	242.4	224.1	210.4	205.8	204.9
27.5°	1624.4	1057.3	527.8	335.7	282.6	240.6	210.4	193.0	183.8	177.4	178.4
30°	1611.6	981.4	457.3	311.9	258.8	213.1	184.8	169.2	161.9	157.3	156.4
32.5°	1601.6	909.2	397.0	289.0	234.2	189.3	164.6	152.7	145.4	140.9	140.9
35°	1617.1	847.0	350.3	266.2	211.3	171.0	149.1	138.1	130.8	127.1	126.2
37.5°	1658.3	790.3	314.6	241.5	190.2	155.5	138.1	125.3	118.0	113.4	111.6
40°	1759.8	758.3	288.1	218.6	170.1	142.7	125.3	113.4	104.3	99.7	98.8
42.5°	1922.6	759.2	262.5	197.6	154.6	131.7	114.3	100.6	90.6	86.0	85.1
45°	2167.7	793.9	242.4	177.4	140.9	119.8	102.4	87.8	78.7	74.1	74.1
47.5°	2461.3	861.6	225.0	160.1	128.1	108.8	90.6	75.9	66.8	63.1	63.1
50°	2779.7	949.4	207.6	141.8	117.1	97.0	77.7	65.9	58.5	55.8	55.8
52.5°	3104.4	1055.5	190.2	127.1	105.2	84.1	66.8	58.5	52.1	50.3	49.4
55°	3530.6	1190.9	172.0	111.6	92.4	72.3	59.5	51.2	43.9	41.2	40.2
57.5°	4186.4	1394.9	151.8	97.9	75.9	60.4	51.2	43.0	34.8	30.2	29.3
60°	4977.6	1643.6	130.8	86.0	61.3	49.4	41.2	32.9	25.6	20.1	19.2
62.5°	5718.5	1801.9	110.7	72.3	48.5	37.5	29.3	24.7	18.3	12.8	11.9
65°	6045.9	1748.8	91.5	58.5	38.4	26.5	19.2	17.4	11.0	5.5	4.6
66°	5937.1	1670.2	84.1	53.1	34.8	22.9	16.5	14.6	8.2	2.7	2.7
67.5°	5616.0	1484.5	73.2	45.7	30.2	18.3	12.8	11.0	4.6	0.9	0.0
70°	4812.0	1200.9	57.6	33.8	22.0	12.8	7.3	5.5	2.7	0.0	0.0
72.5°	3696.1	894.5	45.7	25.6	15.5	7.3	3.7	1.8	2.7	0.0	0.0
75°	2264.7	511.3	35.7	19.2	10.1	4.6	2.7	0.0	2.7	0.9	0.0
77.5°	1005.2	229.6	23.8	12.8	7.3	3.7	1.8	0.0	1.8	0.9	0.0
80°	254.3	75.0	13.7	9.1	5.5	2.7	0.9	0.0	1.8	1.8	0.9
82.5°	69.5	27.4	10.1	7.3	4.6	2.7	0.9	0.0	1.8	1.8	1.8
85°	27.4	12.8	9.1	7.3	5.5	2.7	0.9	0.0	1.8	1.8	1.8
87.5°	12.8	9.1	9.1	8.2	6.4	2.7	0.9	0.0	1.8	0.9	1.8
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)