

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: P453354

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

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453354
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-25)
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-AFL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13557 lumens
Efficiency: N/A
Efficacy: 82.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

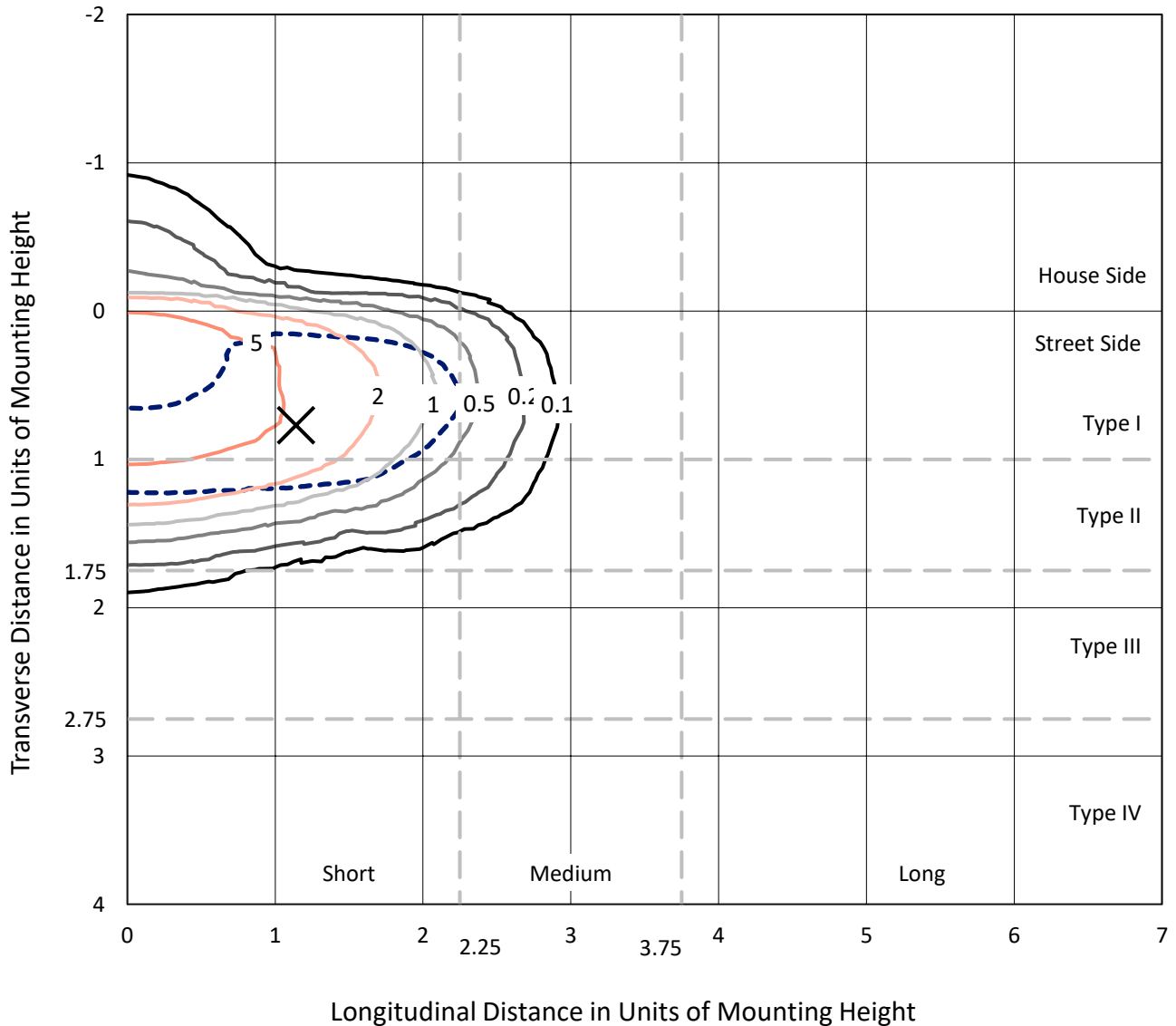
Input Watts (W): 164
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

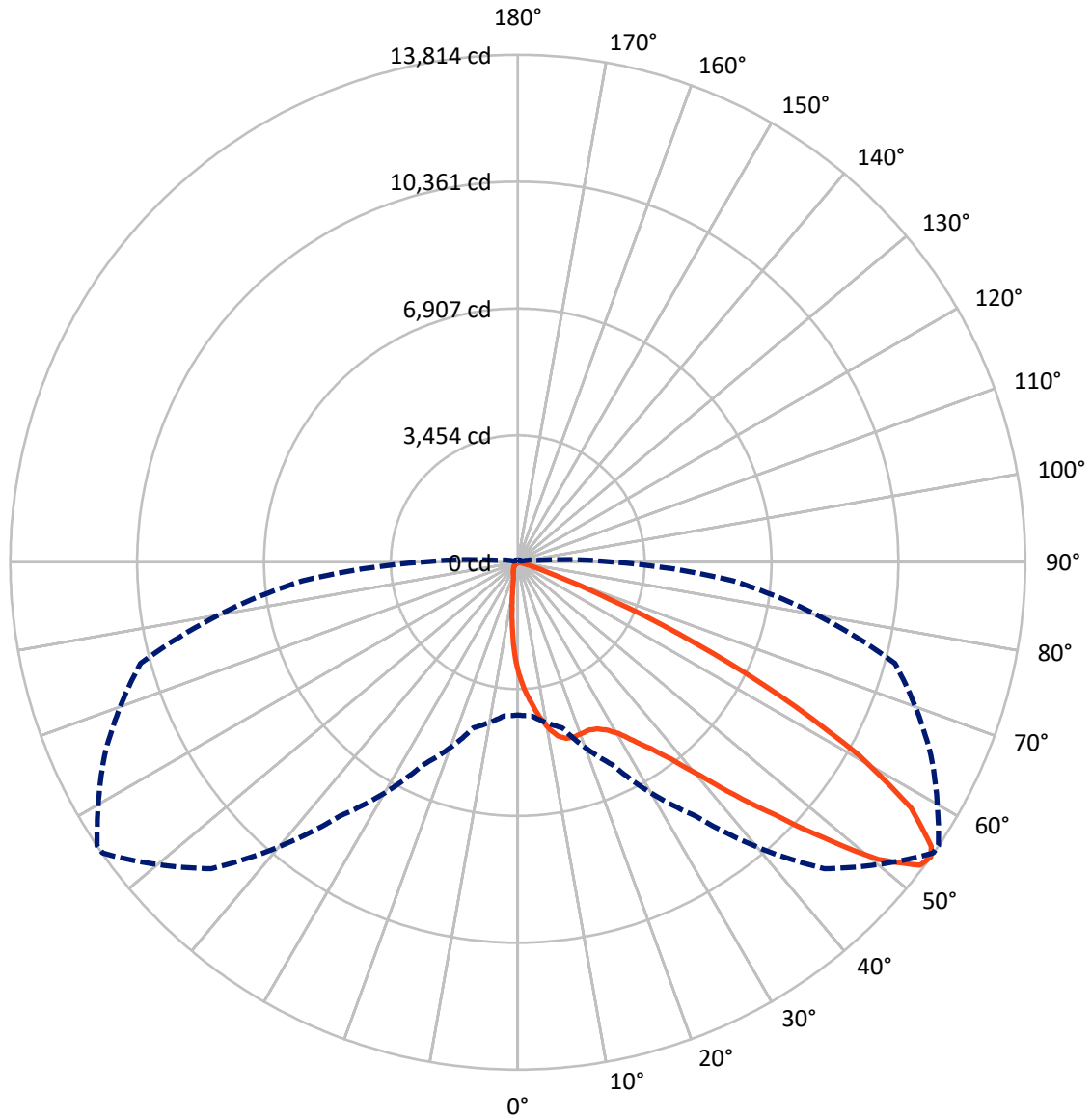
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 54-Deg Vertical

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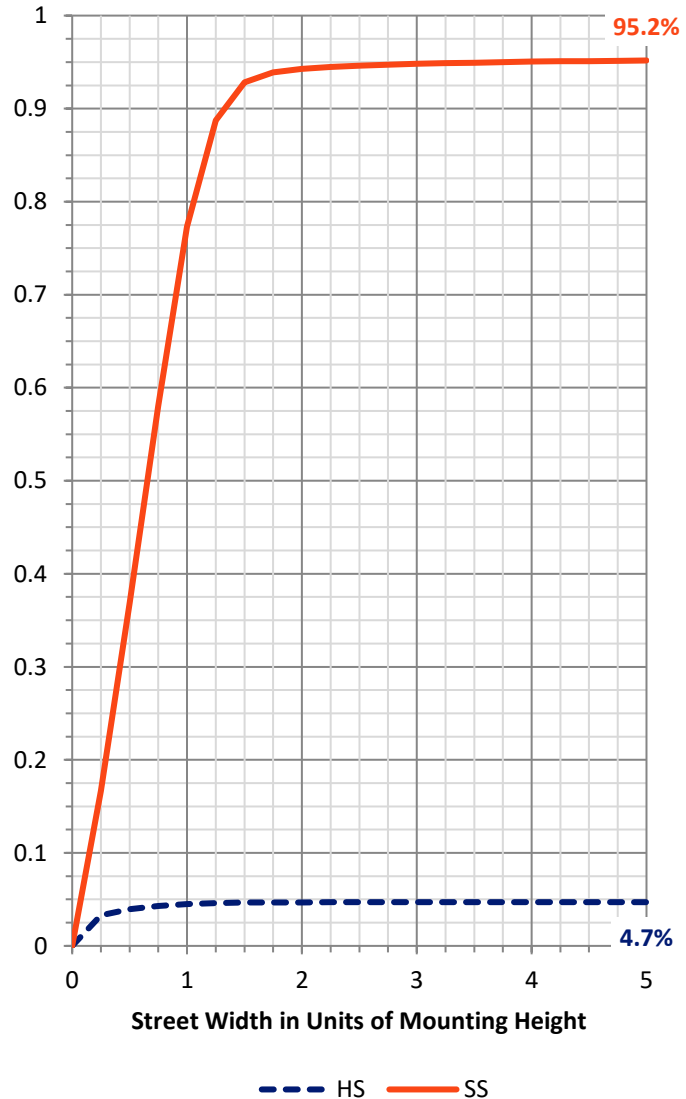
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	641.1	0.0	641.1
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	12915.9	0.0	12915.9
	% Fixture	95.3	0.0	95.3
Total	Lumens	13557.0	0.0	13557.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	266.2	2.0
10°-20°	719.5	5.3
20°-30°	1246.1	9.2
30°-40°	2151.0	15.9
40°-50°	3661.1	27.0
50°-60°	3623.1	26.7
60°-70°	1653.7	12.2
70°-80°	212.4	1.6
80°-90°	23.9	0.2
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°	13557.0	100.0
0°-180°	13557.0	100.0



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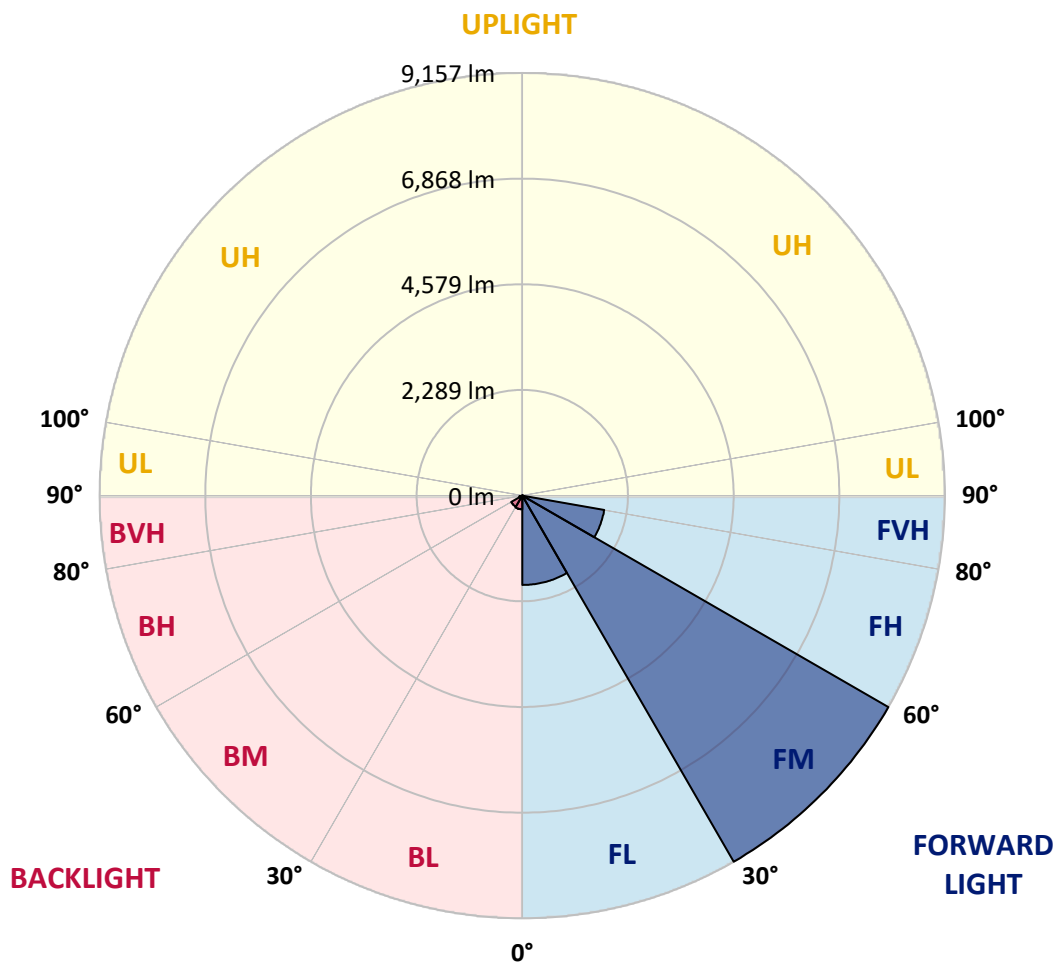
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1935.3	14.3			
FM (30°-60°)	9157.4	67.5			
FH (60°-80°)	1801.8	13.3			G2/5000
FVH (80°-90°)	21.4	0.2			G1/100
BL (0°-30°)	296.5	2.2	B1/500		
BM (30°-60°)	277.8	2.0	B1/1000		
BH (60°-80°)	64.2	0.5	B0/110		G0/110
BVH (80°-90°)	2.6	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	3012.0	3012.0	3012.0	3012.0	3012.0	3012.0	3012.0	3012.0	3012.0	3012.0	3012.0
2.5°	3827.9	3801.3	3764.7	3736.4	3669.6	3573.6	3472.0	3472.0	3374.2	3237.9	3098.9
5°	4415.1	4397.7	4362.0	4288.8	4213.8	4079.4	3875.4	3839.7	3665.0	3418.1	3158.3
7.5°	4653.8	4662.0	4663.9	4644.6	4609.0	4476.3	4274.2	4249.5	3970.5	3639.4	3236.1
10°	4425.1	4465.4	4504.7	4584.3	4696.8	4728.8	4614.5	4588.8	4314.5	3863.5	3320.2
12.5°	4084.9	4106.8	4128.8	4254.1	4480.0	4738.9	4858.7	4857.8	4625.4	4086.7	3427.2
15°	3926.6	3945.8	3947.7	4003.5	4199.2	4576.0	4962.9	4976.7	4929.1	4362.0	3542.5
17.5°	3959.6	3975.1	3962.3	3976.0	4078.5	4396.8	4951.1	4996.8	5175.1	4626.4	3646.7
20°	4174.5	4204.7	4155.3	4116.9	4148.0	4349.2	4910.8	4974.8	5348.9	4884.3	3741.9
22.5°	4560.5	4577.0	4514.8	4409.6	4354.7	4448.9	4899.8	4962.9	5497.1	5095.6	3796.8
25°	4989.5	4984.0	4915.4	4797.4	4682.1	4650.1	4972.1	5028.8	5619.7	5285.8	3813.2
27.5°	5418.4	5434.9	5319.7	5173.3	5035.2	4952.0	5134.0	5176.1	5757.8	5502.6	3833.3
30°	5916.9	5890.4	5777.0	5609.6	5451.4	5335.2	5394.7	5406.6	5948.0	5789.8	3886.4
32.5°	6565.4	6492.3	6365.1	6072.4	5959.0	5762.4	5777.0	5791.6	6179.4	6074.3	3950.4
35°	7445.3	7441.7	7192.9	6798.7	6522.4	6278.2	6214.2	6226.1	6529.8	6496.8	4092.2
37.5°	8504.5	8519.1	8235.6	7838.6	7330.1	6942.3	6810.6	6812.4	7062.1	7080.4	4308.0
40°	9367.0	9405.4	9236.2	8968.2	8466.1	7859.7	7638.3	7618.2	7810.3	7787.4	4616.3
42.5°	9738.4	9774.1	9837.2	9930.5	9654.2	9153.9	8631.6	8659.1	8717.6	8557.6	4962.0
45°	9556.4	9613.1	9861.0	10437.2	10696.9	10528.7	9905.8	9809.7	9561.9	9394.5	5309.6
47.5°	8798.1	8936.2	9350.6	10310.0	11219.2	11788.1	11343.6	11216.5	10407.0	10005.5	5530.9
50°	7551.4	7559.7	8136.8	9363.4	10948.5	12583.0	12811.6	12716.5	11194.5	10348.5	5642.5
52.5°	5474.2	5654.4	6183.1	7603.6	9775.9	12462.2	13747.3	13708.0	12006.7	10524.1	5803.5
54°	4161.7	4196.5	4666.6	6076.1	8428.6	11799.1	13805.0	13814.1	12410.1	10630.2	5898.6
55°	3411.7	3328.4	3822.4	5176.1	7509.4	11212.8	13616.5	13660.4	12591.2	10685.1	5969.1
57.5°	1617.1	1618.0	1995.8	2730.3	4703.2	8706.6	12465.0	12620.5	12611.3	10779.3	6185.8
60°	818.6	824.1	907.3	1260.4	2323.2	5788.0	10306.4	10676.8	11640.9	10793.0	6257.2
62.5°	572.6	566.2	552.5	606.4	977.8	2941.5	7673.1	7995.0	9890.2	10270.7	6030.4
65°	490.3	476.5	438.1	429.9	493.9	1171.7	4779.1	5304.1	7551.4	8893.2	5384.6
67.5°	418.9	413.4	378.7	357.6	349.4	510.4	2465.9	2742.2	5161.4	6392.6	4078.5
70°	355.8	353.1	332.0	305.5	282.6	305.5	914.7	1133.3	2876.6	3441.9	1924.4
72.5°	289.0	291.8	295.4	261.6	237.8	216.8	390.6	454.6	1203.7	1230.2	673.2
75°	253.4	250.6	250.6	227.8	198.5	161.0	214.9	231.4	368.6	342.1	156.4
77.5°	178.4	172.0	201.2	187.5	165.6	114.3	122.6	129.9	152.7	130.8	73.2
80°	123.5	123.5	129.0	168.3	149.1	83.2	75.0	80.5	90.6	77.7	42.1
82.5°	69.5	71.3	84.1	89.6	86.9	55.8	49.4	50.3	60.4	53.1	26.5
85°	8.2	13.7	48.5	47.6	35.7	24.7	27.4	28.4	37.5	32.9	15.5
87.5°	0.9	1.8	10.1	12.8	9.1	10.1	10.1	10.1	12.8	14.6	11.0
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°	3012.0	3012.0	3012.0	3012.0	3012.0	3012.0	3012.0	3012.0	3012.0	3012.0	3012.0
2.5°	3023.9	2954.4	2788.8	2596.7	2474.2	2274.8	2106.5	1984.8	1954.6	1896.1	1913.5
5°	3020.2	2875.7	2538.2	2181.5	1801.0	1517.4	1306.1	1139.7	1066.5	1018.0	984.2
7.5°	3022.0	2796.1	2254.6	1686.6	1232.0	954.0	758.3	656.7	589.0	560.7	564.3
10°	3027.5	2706.5	1925.4	1249.4	831.4	616.5	496.7	448.2	425.3	421.7	420.7
12.5°	3040.3	2608.6	1610.7	927.5	581.7	448.2	402.5	386.0	378.7	378.7	375.9
15°	3054.1	2500.7	1349.1	689.7	448.2	385.1	364.0	355.8	351.2	351.2	350.3
17.5°	3054.1	2376.3	1104.9	535.1	386.0	354.0	337.5	326.5	322.9	322.9	322.0
20°	3034.8	2231.8	888.1	430.8	350.3	324.7	308.2	296.3	291.8	289.9	289.0
22.5°	2968.1	2038.8	707.0	370.4	321.0	299.1	278.1	264.3	260.7	258.8	259.8
25°	2849.2	1821.1	559.8	325.6	294.5	268.0	249.7	239.6	236.0	236.0	236.9
27.5°	2726.6	1593.3	443.6	291.8	262.5	238.7	224.1	217.7	216.8	219.5	220.4
30°	2613.2	1364.7	359.5	264.3	234.2	214.0	204.0	202.1	202.1	203.1	204.0
32.5°	2487.0	1164.4	300.9	240.6	211.3	193.9	188.4	188.4	190.2	190.2	192.1
35°	2407.4	992.4	264.3	217.7	193.9	179.3	175.6	176.5	179.3	182.9	184.8
37.5°	2364.4	855.2	240.6	199.4	177.4	167.4	163.7	165.6	172.0	178.4	179.3
40°	2368.1	751.9	221.3	183.8	164.6	153.7	150.9	156.4	162.8	169.2	170.1
42.5°	2408.3	675.0	203.1	165.6	153.7	138.1	137.2	142.7	145.4	151.8	152.7
45°	2455.9	619.2	183.8	146.3	133.5	119.8	120.7	125.3	129.0	139.0	140.9
47.5°	2470.5	580.8	161.9	124.4	109.8	105.2	106.1	108.8	116.2	125.3	126.2
50°	2487.0	557.0	140.9	105.2	93.3	92.4	93.3	95.1	99.7	103.4	102.4
52.5°	2557.4	556.1	123.5	91.5	79.6	81.4	82.3	81.4	77.7	72.3	70.4
54°	2623.2	558.9	115.2	85.1	73.2	75.9	75.0	70.4	61.3	55.8	53.1
55°	2676.3	561.6	110.7	80.5	69.5	70.4	71.3	62.2	50.3	44.8	43.0
57.5°	2780.6	555.2	99.7	70.4	61.3	57.6	56.7	41.2	27.4	23.8	22.0
60°	2728.4	501.2	90.6	60.4	52.1	46.6	38.4	22.9	13.7	10.1	10.1
62.5°	2523.5	425.3	80.5	49.4	43.0	35.7	20.1	12.8	6.4	3.7	2.7
65°	2257.4	357.6	72.3	39.3	33.8	22.9	11.0	8.2	2.7	0.0	0.0
67.5°	1678.4	265.3	61.3	31.1	25.6	14.6	7.3	4.6	0.9	0.0	0.0
70°	777.5	161.9	52.1	23.8	18.3	11.0	5.5	2.7	0.0	0.0	0.0
72.5°	223.2	101.5	43.0	17.4	12.8	9.1	4.6	1.8	0.9	0.0	0.0
75°	77.7	81.4	32.0	12.8	10.1	6.4	3.7	1.8	0.9	0.0	0.0
77.5°	46.6	65.9	20.1	11.0	8.2	5.5	3.7	1.8	0.9	0.9	0.0
80°	26.5	43.9	12.8	9.1	7.3	4.6	2.7	1.8	0.9	0.9	0.0
82.5°	14.6	21.0	10.1	8.2	6.4	4.6	2.7	1.8	0.9	0.9	0.9
85°	11.9	11.0	8.2	7.3	5.5	3.7	2.7	0.9	0.0	0.0	0.0
87.5°	9.1	7.3	7.3	7.3	5.5	3.7	2.7	0.9	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)