

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: P451282

Luminaire Tested: **GALN-SA2A-827-U-T2R-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451282
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-7)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA2A-827-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5413 lumens
Efficiency: N/A
Efficacy: 85.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B0 - U0 - G1

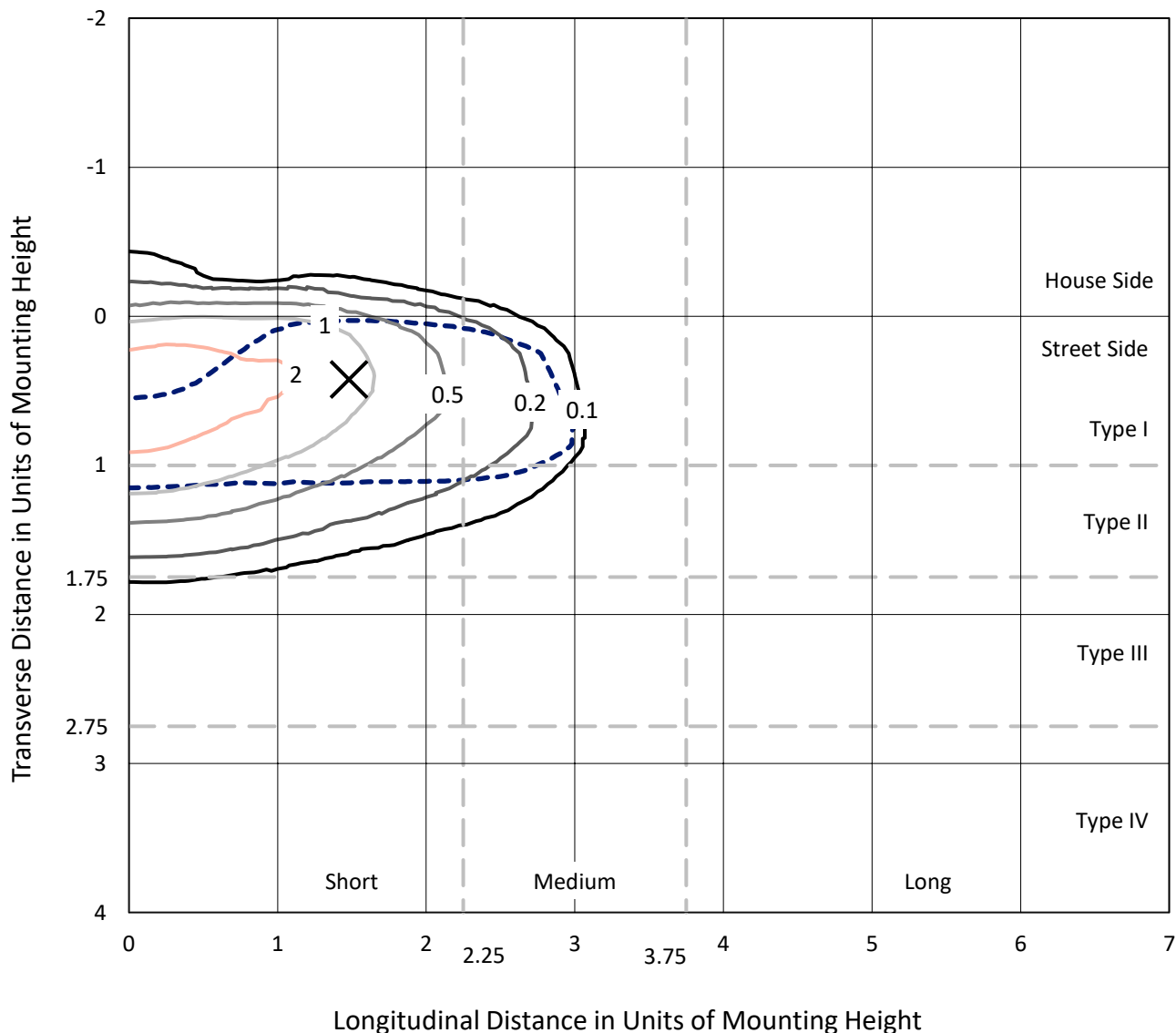
Input Watts (W): 63
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

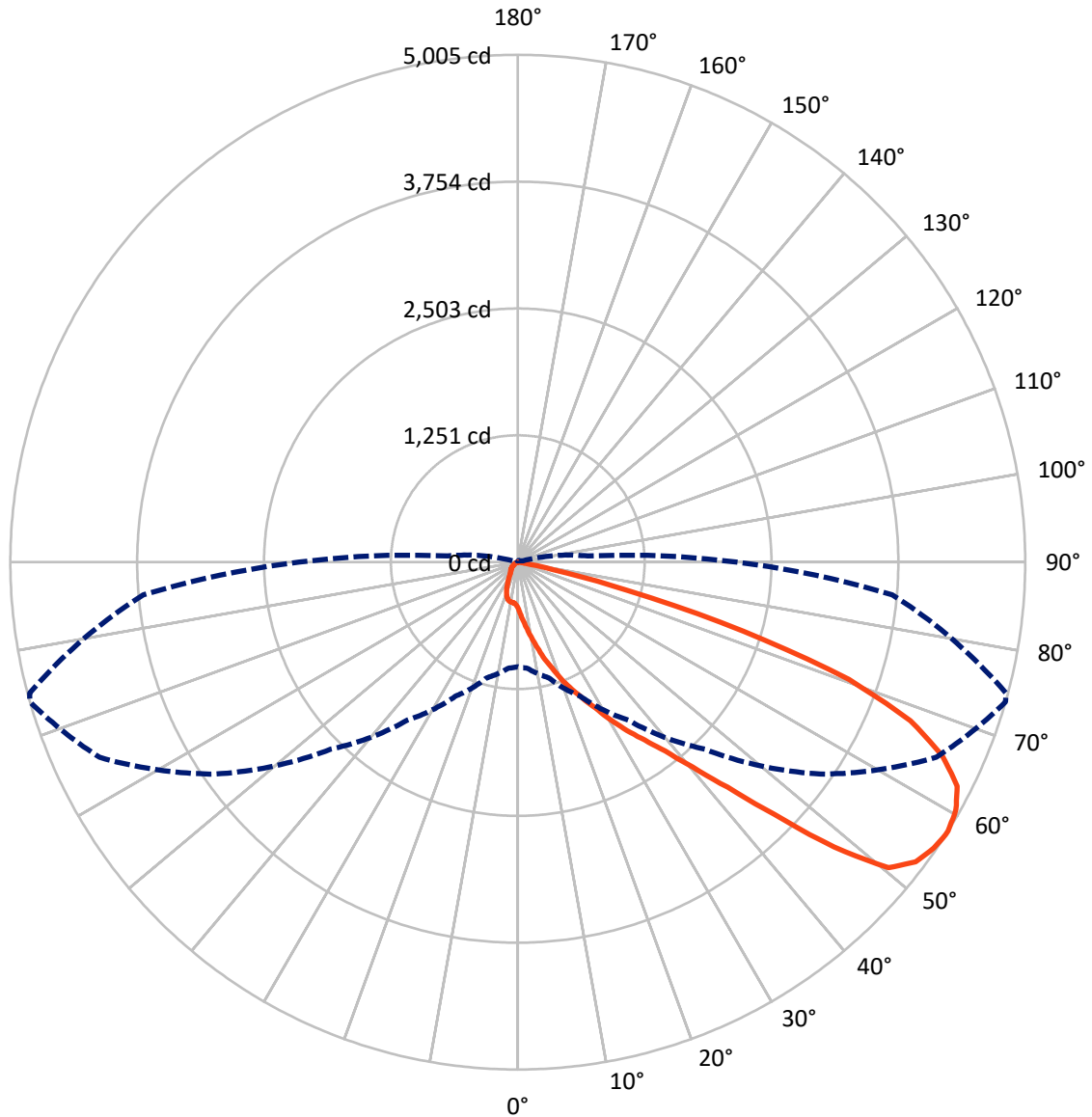
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral - - - Horizontal Cone Through 57-Deg Vertical

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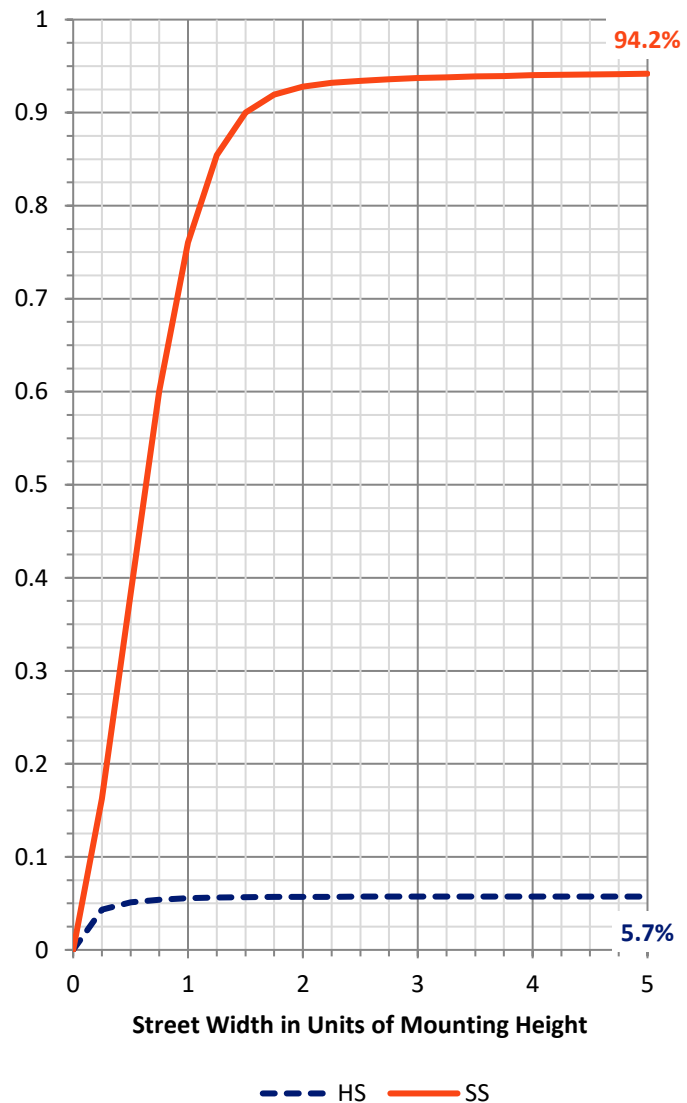
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	312.2	0.0	312.2
	% Fixture	5.8	0.0	5.8
Street Side	Lumens	5100.8	0.0	5100.8
	% Fixture	94.2	0.0	94.2
Total	Lumens	5413.0	0.0	5413.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.7	1.0
10°-20°	215.7	4.0
20°-30°	461.5	8.5
30°-40°	848.2	15.7
40°-50°	1300.3	24.0
50°-60°	1375.6	25.4
60°-70°	898.3	16.6
70°-80°	245.4	4.5
80°-90°	13.2	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°	5413.0	100.0
0°-180°	5413.0	100.0



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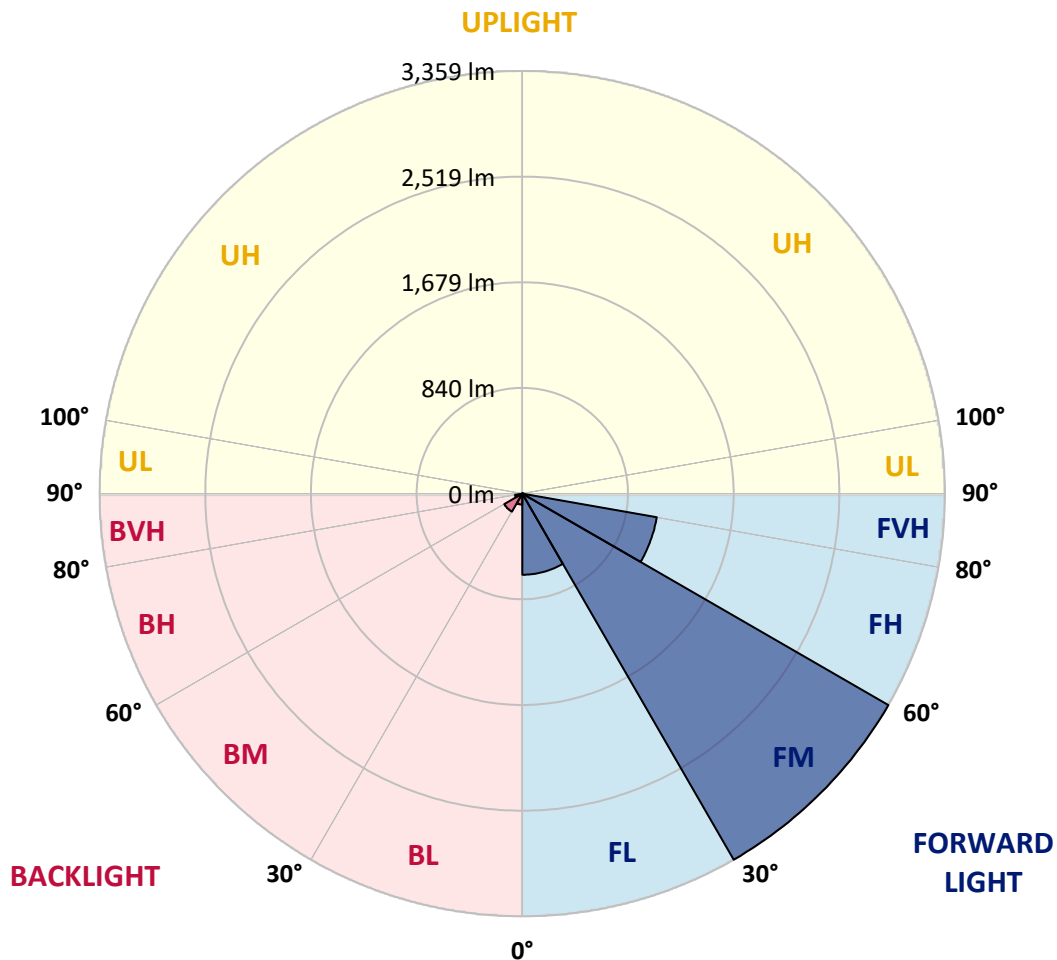
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	644.7	11.9			
FM	(30°-60°)	3358.9	62.1			
FH	(60°-80°)	1085.1	20.0			G1/1800
FVH	(80°-90°)	12.1	0.2			G1/100
BL	(0°-30°)	87.2	1.6	B0/110		
BM	(30°-60°)	165.3	3.1	B0/220		
BH	(60°-80°)	58.6	1.1	B0/110		G0/110
BVH	(80°-90°)	1.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	453.3	453.3	453.3	453.3	453.3	453.3	453.3	453.3	453.3	453.3	453.3
2.5°	663.4	657.4	645.4	641.3	623.8	596.5	572.6	540.4	515.0	512.4	481.7
5°	888.4	874.9	869.3	842.4	800.2	760.5	692.5	640.9	581.5	577.0	515.4
7.5°	1105.1	1086.4	1080.8	1055.4	1006.1	943.7	855.5	761.7	667.5	658.9	560.6
10°	1262.1	1264.7	1254.6	1237.8	1197.8	1134.3	1025.5	897.3	763.2	752.3	611.4
12.5°	1374.6	1374.2	1376.1	1375.7	1354.4	1306.2	1191.8	1044.2	868.5	847.2	669.7
15°	1447.8	1448.9	1454.5	1474.0	1476.2	1446.3	1351.0	1184.7	990.8	964.2	732.9
17.5°	1521.8	1529.7	1538.6	1556.9	1573.4	1561.4	1494.2	1331.2	1101.4	1081.6	800.5
20°	1644.0	1654.9	1649.6	1660.8	1669.4	1670.6	1618.6	1466.5	1235.5	1202.3	877.9
22.5°	1839.5	1839.1	1825.7	1805.5	1788.7	1787.9	1740.8	1605.5	1357.4	1325.2	955.6
25°	2086.5	2087.6	2061.5	2003.9	1962.1	1910.9	1856.7	1727.4	1487.8	1448.2	1037.5
27.5°	2369.8	2362.7	2323.1	2243.9	2160.9	2073.4	1995.3	1869.0	1626.1	1593.2	1131.3
30°	2624.3	2621.7	2575.4	2478.6	2369.4	2281.6	2168.4	2046.5	1805.1	1764.7	1236.3
32.5°	2861.3	2865.0	2800.7	2700.6	2595.2	2493.9	2374.3	2216.2	1980.8	1923.6	1350.7
35°	3046.3	3050.0	2983.5	2900.1	2791.7	2707.7	2593.7	2397.1	2154.2	2106.0	1482.2
37.5°	3144.9	3149.8	3111.3	3048.5	2980.9	2938.6	2832.5	2629.9	2364.9	2335.8	1637.7
40°	3163.6	3169.2	3152.4	3135.6	3131.8	3162.1	3131.1	2904.2	2657.2	2611.6	1869.4
42.5°	3107.5	3115.0	3122.5	3159.9	3236.1	3347.1	3455.1	3276.5	3033.5	2972.3	2152.7
45°	2960.3	2959.5	2989.1	3085.9	3256.7	3493.6	3793.7	3742.5	3546.3	3473.4	2552.9
47.5°	2708.4	2704.7	2768.6	2906.5	3172.6	3520.5	4069.9	4308.3	4200.7	4133.4	2983.1
50°	2324.6	2342.9	2443.4	2635.9	2963.7	3439.0	4155.1	4679.4	4737.7	4666.4	3330.7
52.5°	1875.0	1874.2	2032.0	2293.2	2654.2	3259.7	4095.7	4746.7	4912.3	4857.7	3501.8
55°	1387.7	1397.4	1561.4	1824.9	2252.5	2932.3	3901.7	4677.6	4978.8	4940.3	3614.7
57°	1032.2	1049.4	1181.0	1459.8	1902.6	2608.2	3643.5	4553.9	5005.0	4984.0	3708.5
57.5°	963.5	964.2	1092.4	1345.8	1800.2	2483.8	3569.5	4502.3	5004.2	4992.6	3723.8
60°	593.1	611.8	700.4	909.7	1317.8	1938.5	3073.5	4205.9	4965.3	4982.2	3789.2
62.5°	355.0	362.9	420.4	548.3	849.5	1414.9	2515.2	3826.6	4864.1	4915.3	3784.7
65°	228.3	230.2	256.4	331.9	531.1	956.4	1938.2	3325.4	4602.1	4696.3	3636.7
67.5°	176.4	179.4	189.9	217.9	308.0	595.7	1370.8	2790.6	4178.3	4299.7	3278.0
70°	156.6	158.1	161.8	170.8	203.7	336.4	852.8	2180.0	3464.8	3499.2	2565.3
72.5°	127.8	131.9	143.5	146.5	161.5	210.0	474.6	1463.1	2327.9	2336.5	1435.1
75°	99.0	99.8	117.0	125.6	136.0	144.6	211.9	737.7	1118.2	1058.4	553.1
77.5°	74.0	77.4	85.2	96.0	111.0	103.5	94.9	278.1	347.2	340.8	160.7
80°	47.5	49.3	59.4	72.1	86.3	67.6	53.4	81.5	76.2	78.5	38.5
82.5°	23.9	24.3	38.1	58.7	54.9	34.0	33.6	33.3	28.4	28.0	17.9
85°	2.6	5.6	24.7	33.6	24.7	11.2	15.7	15.3	14.9	15.3	10.5
87.5°	0.4	0.4	4.1	4.9	3.4	3.7	4.5	4.9	6.0	5.6	4.5
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°	453.3	453.3	453.3	453.3	453.3	453.3	453.3	453.3	453.3	453.3	453.3
2.5°	466.8	451.8	424.2	397.6	377.8	365.1	348.7	342.7	334.1	333.0	328.9
5°	487.0	458.6	410.4	372.2	341.6	318.4	298.2	281.4	268.0	265.0	266.5
7.5°	515.7	473.5	406.2	354.3	311.7	272.1	239.9	220.1	205.9	200.7	201.4
10°	548.3	493.3	405.5	335.2	270.2	221.6	186.5	168.9	160.7	157.7	154.3
12.5°	586.8	516.1	403.6	305.7	224.6	176.8	151.7	141.3	133.4	131.2	131.2
15°	630.1	540.4	394.7	269.1	182.4	146.1	129.3	121.1	118.5	116.2	116.2
17.5°	675.3	564.3	376.0	223.9	151.4	125.2	114.7	109.9	106.1	103.5	103.5
20°	726.9	587.9	346.1	183.9	127.8	111.7	103.5	97.9	94.9	92.7	91.9
22.5°	775.9	606.9	308.0	151.0	111.4	100.5	93.1	87.1	84.1	83.0	83.0
25°	826.7	618.5	262.0	124.8	101.7	91.2	83.0	78.1	75.5	74.7	74.4
27.5°	876.0	625.2	221.6	109.1	92.7	82.6	74.7	71.0	68.4	67.6	68.0
30°	935.8	626.4	182.4	97.9	84.8	74.4	67.3	63.9	62.4	61.7	61.3
32.5°	996.4	624.9	153.2	91.2	77.4	67.3	61.3	58.7	57.6	56.4	56.4
35°	1064.4	617.0	130.4	84.5	70.3	61.3	56.1	53.8	52.3	51.2	50.8
37.5°	1148.8	612.9	117.4	77.0	63.9	55.7	50.8	48.6	47.5	46.0	45.6
40°	1281.9	631.2	113.2	70.3	57.6	50.5	46.0	43.4	41.9	40.4	40.0
42.5°	1447.8	663.4	106.5	63.5	51.9	45.6	41.1	38.1	35.5	33.6	32.9
45°	1662.7	705.6	96.0	56.4	47.1	40.4	36.3	32.5	29.2	27.7	27.3
47.5°	1888.1	746.3	86.7	50.8	41.9	35.9	31.4	27.3	24.3	23.2	22.8
50°	2026.4	754.6	80.7	44.5	36.6	31.0	26.5	22.8	20.9	19.8	19.8
52.5°	2089.5	741.5	72.5	38.9	31.8	27.3	22.8	19.8	18.7	17.9	17.6
55°	2133.6	721.3	61.7	33.6	27.3	23.2	20.2	17.9	16.4	15.7	15.3
57°	2159.4	694.0	53.4	29.5	23.5	20.2	17.9	16.1	14.6	13.1	13.1
57.5°	2160.5	683.5	51.2	29.2	22.4	19.4	17.6	15.7	13.8	12.3	12.0
60°	2127.3	611.8	41.1	24.7	17.9	16.4	14.6	12.3	9.7	8.2	7.8
62.5°	2020.4	520.6	34.0	20.9	14.6	12.7	10.5	9.3	6.7	4.9	4.9
65°	1858.5	422.3	29.2	16.8	12.0	9.3	7.1	6.7	4.1	2.2	1.9
67.5°	1624.6	328.9	24.7	13.8	10.1	6.7	4.9	4.5	2.2	0.7	0.0
70°	1237.8	224.2	20.6	11.2	7.5	4.9	3.4	2.6	1.5	0.4	0.0
72.5°	713.4	123.3	17.2	8.6	5.6	3.7	2.6	1.5	1.5	0.0	0.0
75°	254.9	53.1	13.1	6.4	4.5	3.0	1.9	0.7	1.1	0.4	0.0
77.5°	81.1	28.4	8.6	4.9	3.7	2.2	1.5	0.7	0.7	0.4	0.0
80°	23.9	14.9	5.2	4.1	2.6	1.9	1.1	0.4	0.7	0.4	0.0
82.5°	13.1	7.5	4.1	3.0	2.6	1.5	1.1	0.4	0.4	0.4	0.0
85°	6.7	4.5	3.4	3.0	2.6	1.5	1.1	0.4	0.0	0.4	0.4
87.5°	3.7	3.4	3.4	3.0	2.6	1.9	1.1	0.4	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)