

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: P452210

Luminaire Tested: **GALN-SA3A-827-U-T2R-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P452210
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-SA3A-827-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 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: 8035 lumens
Efficiency: N/A
Efficacy: 86.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

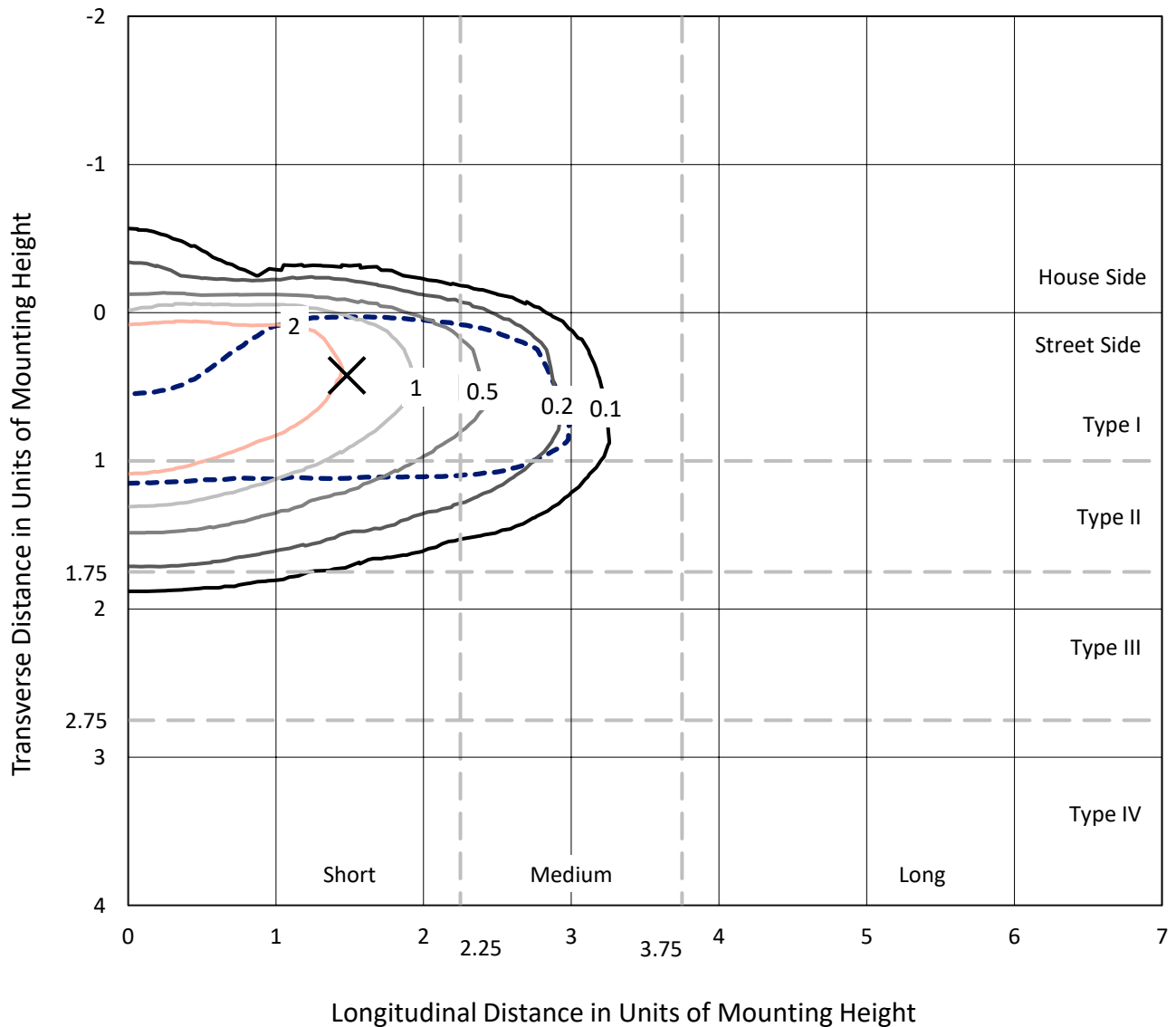
Input Watts (W): 93
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P452210
 CATALOG NUMBER: GALN-SA3A-827-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

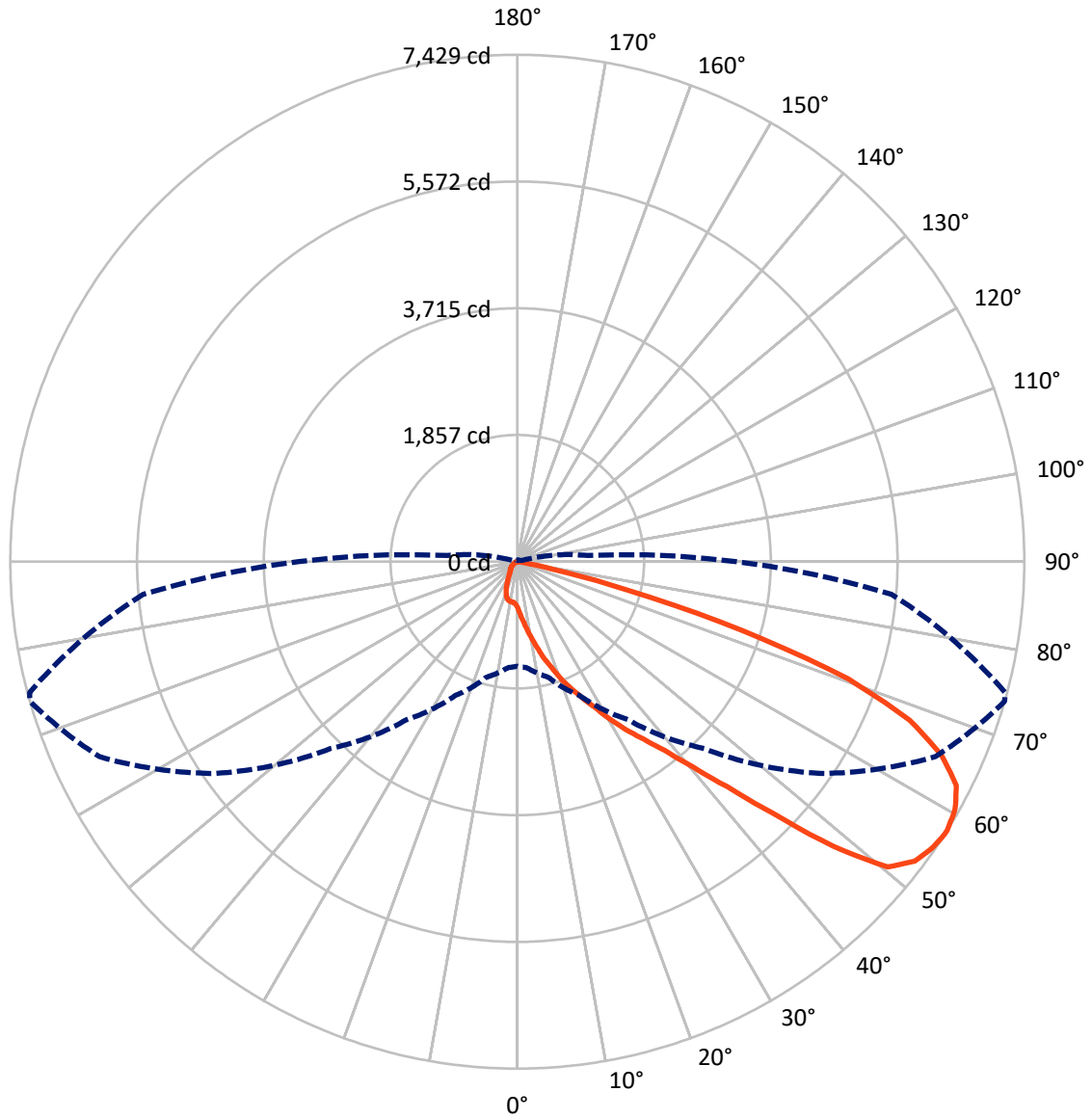
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
 Type II - Short - N/A

REPORT NUMBER: P452210
CATALOG NUMBER: GALN-SA3A-827-U-T2R-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P452210

CATALOG NUMBER: GALN-SA3A-827-U-T2R-HSS

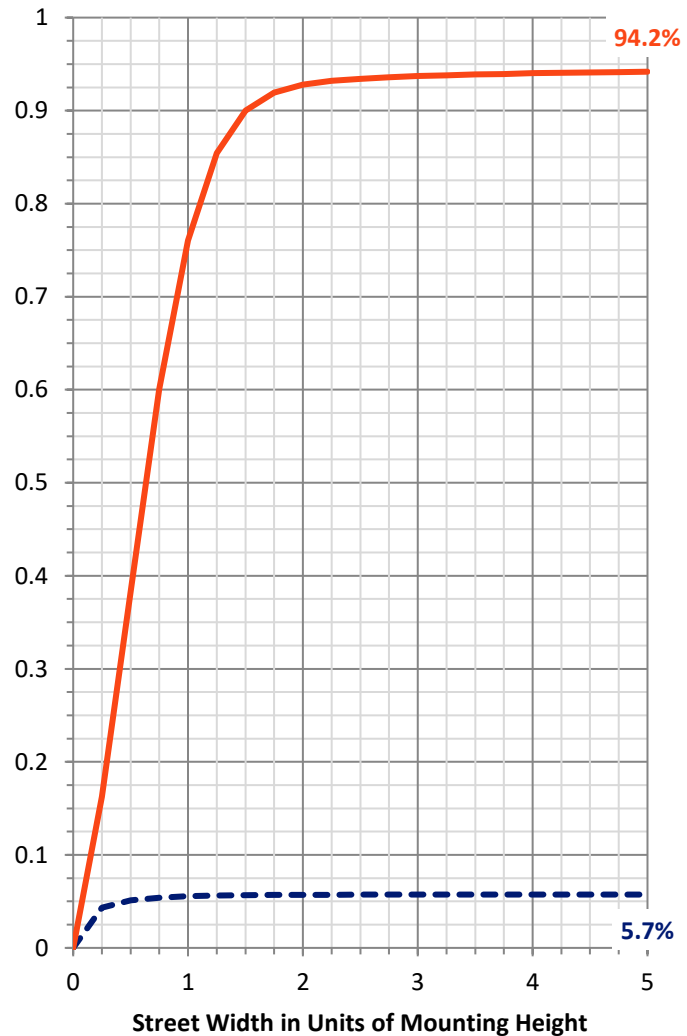
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	463.4	0.0	463.4
	% Fixture	5.8	0.0	5.8
Street Side	Lumens	7571.6	0.0	7571.6
	% Fixture	94.2	0.0	94.2
Total	Lumens	8035.0	0.0	8035.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.2	1.0
10°-20°	320.1	4.0
20°-30°	685.0	8.5
30°-40°	1259.1	15.7
40°-50°	1930.2	24.0
50°-60°	2041.9	25.4
60°-70°	1333.4	16.6
70°-80°	364.3	4.5
80°-90°	19.6	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°	8035.0	100.0
0°-180°	8035.0	100.0



REPORT NUMBER: P452210

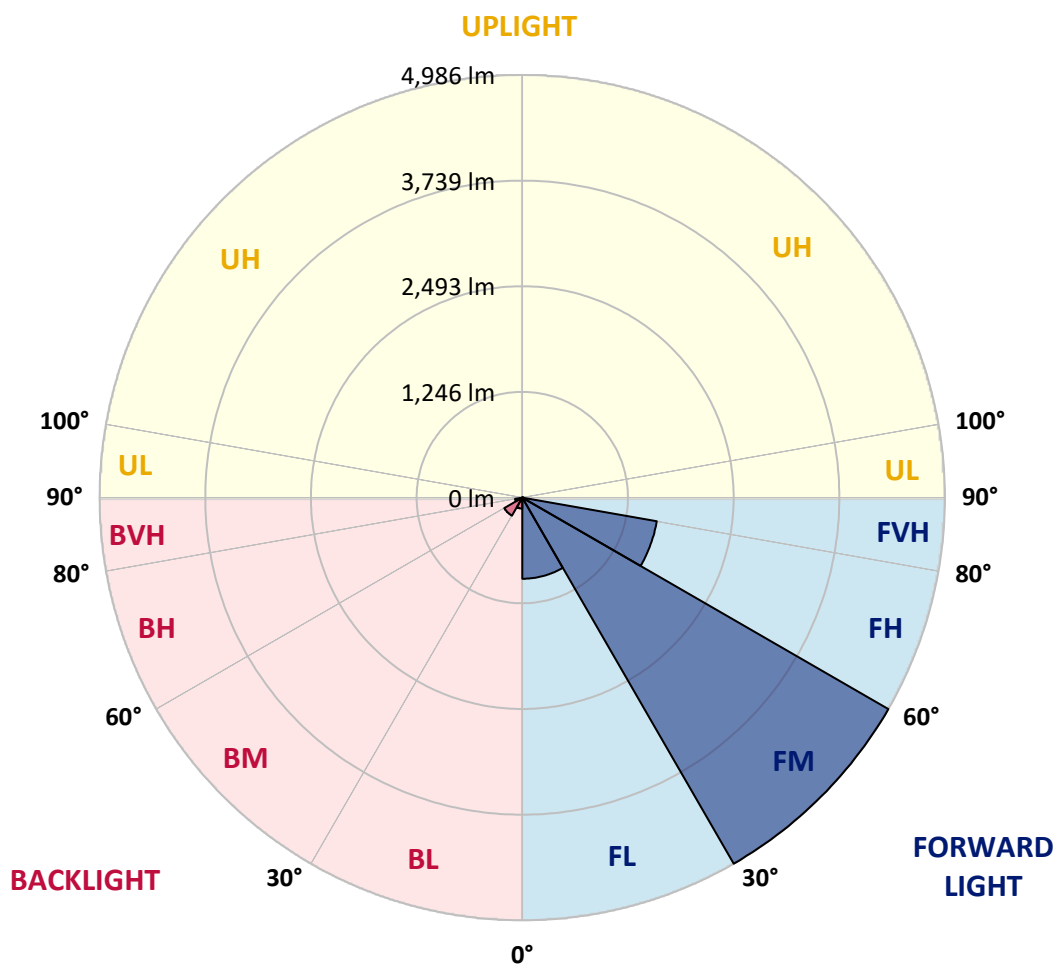
CATALOG NUMBER: GALN-SA3A-827-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	957.0	11.9			
FM	(30°-60°)	4985.9	62.1			
FH	(60°-80°)	1610.7	20.0			G1/1800
FVH	(80°-90°)	18.0	0.2			G1/100
BL	(0°-30°)	129.5	1.6	B1/500		
BM	(30°-60°)	245.4	3.1	B1/1000		
BH	(60°-80°)	87.0	1.1	B0/110		G0/110
BVH	(80°-90°)	1.6	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-G1

Type II Short





REPORT NUMBER: P452210

CATALOG NUMBER: GALN-SA3A-827-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	672.9	672.9	672.9	672.9	672.9	672.9	672.9	672.9	672.9	672.9	672.9
2.5°	984.7	975.8	958.1	952.0	925.9	885.4	849.9	802.2	764.5	760.6	715.1
5°	1318.7	1298.7	1290.4	1250.4	1187.7	1128.9	1028.0	951.4	863.2	856.5	765.0
7.5°	1640.4	1612.7	1604.4	1566.6	1493.4	1400.8	1269.8	1130.6	990.8	978.0	832.1
10°	1873.4	1877.3	1862.3	1837.4	1778.0	1683.7	1522.3	1332.0	1132.8	1116.7	907.6
12.5°	2040.4	2039.8	2042.6	2042.1	2010.4	1938.9	1769.1	1550.0	1289.3	1257.6	994.1
15°	2149.1	2150.8	2159.1	2188.0	2191.3	2146.9	2005.4	1758.6	1470.7	1431.3	1087.9
17.5°	2259.0	2270.6	2283.9	2311.1	2335.5	2317.8	2217.9	1976.0	1634.9	1605.5	1188.3
20°	2440.4	2456.5	2448.7	2465.3	2478.1	2479.8	2402.7	2176.9	1834.0	1784.7	1303.1
22.5°	2730.5	2730.0	2710.0	2680.0	2655.1	2654.0	2584.1	2383.2	2014.9	1967.2	1418.5
25°	3097.2	3098.9	3060.0	2974.6	2912.5	2836.5	2756.0	2564.1	2208.5	2149.7	1540.0
27.5°	3517.7	3507.2	3448.4	3330.8	3207.6	3077.8	2961.9	2774.3	2413.7	2364.9	1679.3
30°	3895.5	3891.6	3822.8	3679.2	3517.2	3386.8	3218.7	3037.9	2679.5	2619.6	1835.1
32.5°	4247.2	4252.8	4157.4	4008.7	3852.2	3701.9	3524.4	3289.7	2940.2	2855.3	2004.9
35°	4521.8	4527.4	4428.6	4304.9	4144.0	4019.2	3850.0	3558.2	3197.6	3126.1	2200.2
37.5°	4668.3	4675.5	4618.4	4525.2	4424.7	4362.1	4204.5	3903.8	3510.5	3467.2	2430.9
40°	4696.0	4704.3	4679.4	4654.4	4648.9	4693.8	4647.8	4311.0	3944.3	3876.6	2774.9
42.5°	4612.8	4623.9	4635.0	4690.5	4803.6	4968.4	5128.7	4863.6	4503.0	4412.0	3195.4
45°	4394.2	4393.1	4437.0	4580.6	4834.2	5185.9	5631.3	5555.3	5264.1	5155.9	3789.5
47.5°	4020.3	4014.8	4109.6	4314.3	4709.3	5225.8	6041.3	6395.2	6235.5	6135.6	4428.1
50°	3450.6	3477.8	3627.0	3912.7	4399.2	5104.9	6167.8	6946.1	7032.7	6926.7	4944.0
52.5°	2783.2	2782.1	3016.2	3404.0	3939.9	4838.6	6079.6	7046.0	7291.7	7210.7	5198.1
55°	2059.8	2074.2	2317.8	2708.9	3343.5	4352.6	5791.7	6943.3	7390.5	7333.3	5365.6
57°	1532.2	1557.8	1753.0	2166.9	2824.3	3871.7	5408.3	6759.7	7429.3	7398.2	5504.9
57.5°	1430.2	1431.3	1621.6	1997.7	2672.3	3686.9	5298.5	6683.2	7428.2	7411.0	5527.6
60°	880.4	908.1	1039.6	1350.3	1956.1	2877.5	4562.3	6243.2	7370.5	7395.5	5624.7
62.5°	527.0	538.7	624.1	813.8	1261.0	2100.3	3733.5	5680.2	7220.2	7296.2	5618.0
65°	339.0	341.7	380.6	492.6	788.3	1419.6	2877.0	4936.2	6831.3	6971.1	5398.3
67.5°	261.8	266.3	281.8	323.4	457.1	884.3	2034.9	4142.4	6202.2	6382.5	4865.8
70°	232.4	234.7	240.2	253.5	302.3	499.3	1266.0	3235.9	5143.2	5194.2	3807.9
72.5°	189.7	195.8	213.0	217.5	239.7	311.8	704.5	2171.9	3455.6	3468.3	2130.3
75°	147.0	148.1	173.6	186.4	201.9	214.7	314.5	1095.1	1659.8	1571.1	821.0
77.5°	109.8	114.8	126.5	142.6	164.8	153.7	140.9	412.7	515.4	505.9	238.5
80°	70.5	73.2	88.2	107.1	128.1	100.4	79.3	120.9	113.2	116.5	57.1
82.5°	35.5	36.1	56.6	87.1	81.5	50.5	49.9	49.4	42.2	41.6	26.6
85°	3.9	8.3	36.6	49.9	36.6	16.6	23.3	22.7	22.2	22.7	15.5
87.5°	0.6	0.6	6.1	7.2	5.0	5.5	6.7	7.2	8.9	8.3	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



REPORT NUMBER: P452210

CATALOG NUMBER: GALN-SA3A-827-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	672.9	672.9	672.9	672.9	672.9	672.9	672.9	672.9	672.9	672.9	672.9
2.5°	692.9	670.7	629.6	590.3	560.9	542.0	517.6	508.7	496.0	494.3	488.2
5°	722.8	680.7	609.1	552.5	507.0	472.7	442.7	417.7	397.8	393.3	395.5
7.5°	765.6	702.9	603.0	525.9	462.7	403.9	356.2	326.8	305.7	297.9	299.0
10°	813.8	732.3	601.9	497.6	401.1	329.0	276.8	250.8	238.5	234.1	229.1
12.5°	871.0	766.1	599.1	453.8	333.4	262.4	225.2	209.7	198.0	194.7	194.7
15°	935.3	802.2	585.8	399.4	270.7	216.9	191.9	179.7	175.9	172.5	172.5
17.5°	1002.4	837.7	558.1	332.3	224.7	185.8	170.3	163.1	157.6	153.7	153.7
20°	1079.0	872.6	513.7	272.9	189.7	165.9	153.7	145.3	140.9	137.6	136.5
22.5°	1151.7	900.9	457.1	224.1	165.3	149.2	138.1	129.3	124.8	123.2	123.2
25°	1227.1	918.1	388.9	185.3	150.9	135.4	123.2	115.9	112.1	111.0	110.4
27.5°	1300.4	928.1	329.0	162.0	137.6	122.6	111.0	105.4	101.5	100.4	101.0
30°	1389.1	929.8	270.7	145.3	125.9	110.4	99.9	94.9	92.6	91.5	91.0
32.5°	1479.0	927.6	227.5	135.4	114.8	99.9	91.0	87.1	85.4	83.8	83.8
35°	1579.9	915.9	193.6	125.4	104.3	91.0	83.2	79.9	77.7	76.0	75.4
37.5°	1705.3	909.8	174.2	114.3	94.9	82.7	75.4	72.1	70.5	68.2	67.7
40°	1902.8	937.0	168.1	104.3	85.4	74.9	68.2	64.4	62.1	59.9	59.4
42.5°	2149.1	984.7	158.1	94.3	77.1	67.7	61.0	56.6	52.7	49.9	48.8
45°	2468.1	1047.4	142.6	83.8	69.9	59.9	53.8	48.3	43.3	41.1	40.5
47.5°	2802.6	1107.9	128.7	75.4	62.1	53.3	46.6	40.5	36.1	34.4	33.8
50°	3007.9	1120.1	119.8	66.0	54.4	46.0	39.4	33.8	31.1	29.4	29.4
52.5°	3101.6	1100.6	107.6	57.7	47.2	40.5	33.8	29.4	27.7	26.6	26.1
55°	3167.1	1070.7	91.5	49.9	40.5	34.4	30.0	26.6	24.4	23.3	22.7
57°	3205.4	1030.2	79.3	43.8	34.9	30.0	26.6	23.9	21.6	19.4	19.4
57.5°	3207.1	1014.7	76.0	43.3	33.3	28.8	26.1	23.3	20.5	18.3	17.8
60°	3157.7	908.1	61.0	36.6	26.6	24.4	21.6	18.3	14.4	12.2	11.6
62.5°	2999.0	772.8	50.5	31.1	21.6	18.9	15.5	13.9	10.0	7.2	7.2
65°	2758.8	626.9	43.3	25.0	17.8	13.9	10.5	10.0	6.1	3.3	2.8
67.5°	2411.5	488.2	36.6	20.5	15.0	10.0	7.2	6.7	3.3	1.1	0.0
70°	1837.4	332.9	30.5	16.6	11.1	7.2	5.0	3.9	2.2	0.6	0.0
72.5°	1059.0	183.1	25.5	12.8	8.3	5.5	3.9	2.2	2.2	0.0	0.0
75°	378.3	78.8	19.4	9.4	6.7	4.4	2.8	1.1	1.7	0.6	0.0
77.5°	120.4	42.2	12.8	7.2	5.5	3.3	2.2	1.1	1.1	0.6	0.0
80°	35.5	22.2	7.8	6.1	3.9	2.8	1.7	0.6	1.1	0.6	0.0
82.5°	19.4	11.1	6.1	4.4	3.9	2.2	1.7	0.6	0.6	0.6	0.0
85°	10.0	6.7	5.0	4.4	3.9	2.2	1.7	0.6	0.0	0.6	0.6
87.5°	5.5	5.0	5.0	4.4	3.9	2.8	1.7	0.6	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)