

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: P300714

Luminaire Tested: **GLNA-AF-10-LED-E1-AFL-7027-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300714
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24297)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-10-LED-E1-AFL-7027-800-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline WITH HOUSESIDE SHIELD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30755.3 lumens
Efficiency: N/A
Efficacy: 73.4 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 419
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: 25 FT

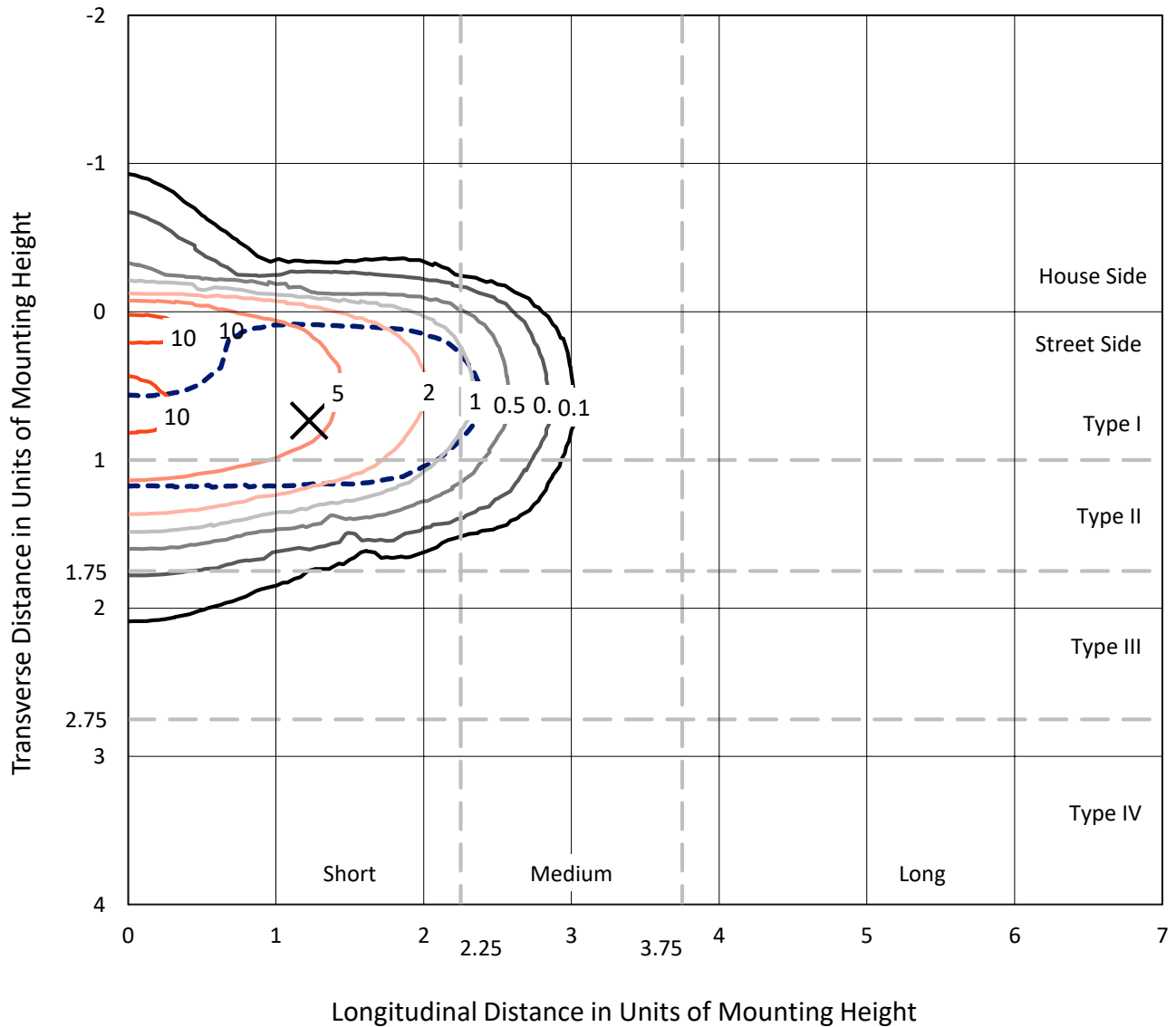


REPORT NUMBER: P300714

CATALOG NUMBER: GLNA-AF-10-LED-E1-AFL-7027-800-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

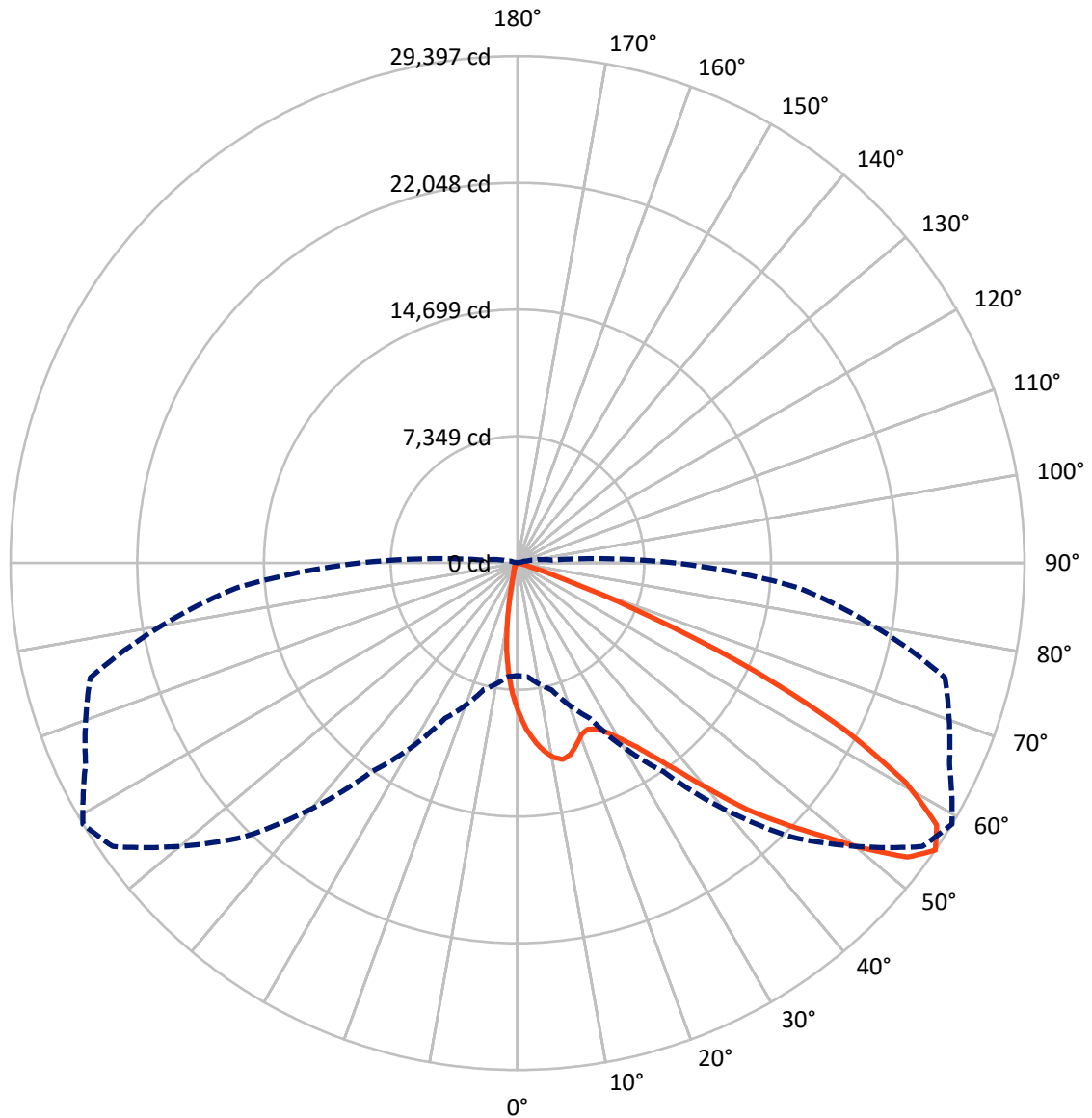


Based on 30 foot mounting height. Maximum calculated value = 12 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P300714

CATALOG NUMBER: GLNA-AF-10-LED-E1-AFL-7027-800-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

REPORT NUMBER: P300714

CATALOG NUMBER: GLNA-AF-10-LED-E1-AFL-7027-800-HSS

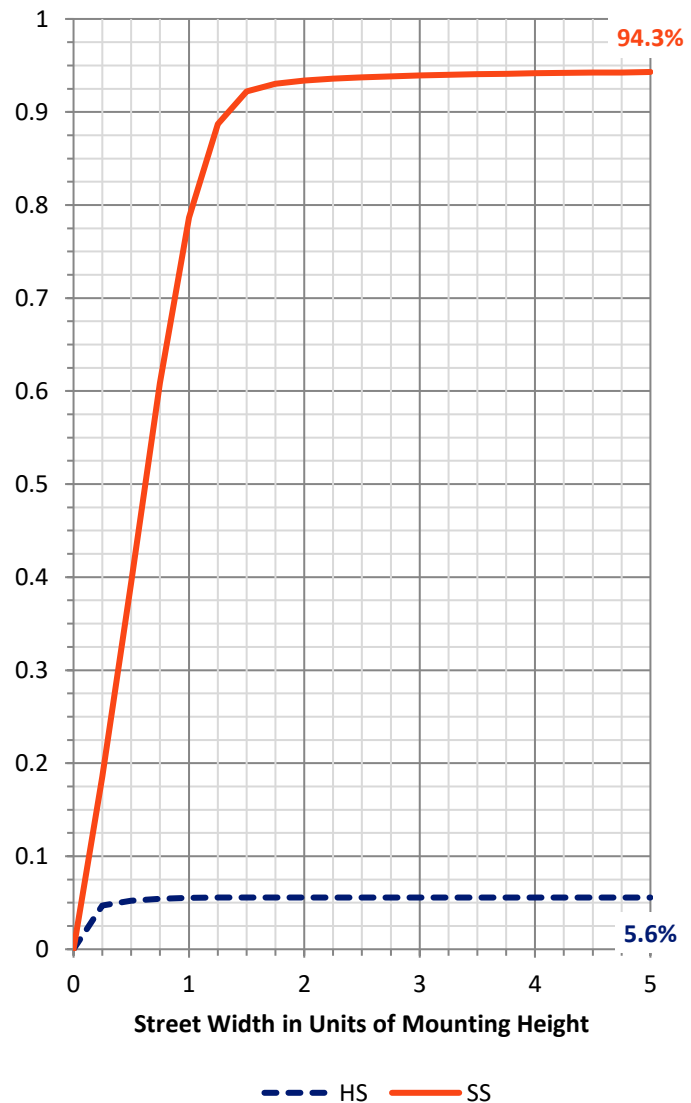
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1717.8	0.0	1717.8
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	29037.4	0.0	29037.4
	% Fixture	94.4	0.0	94.4
Total	Lumens	30755.3	0.0	30755.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	725.2	2.4
10°-20°	1736.2	5.6
20°-30°	2954.4	9.6
30°-40°	5080.9	16.5
40°-50°	7844.4	25.5
50°-60°	7886.1	25.6
60°-70°	4044.0	13.1
70°-80°	438.3	1.4
80°-90°	45.8	0.1
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°	30755.3	100.0
0°-180°	30755.3	100.0

Coefficient of Utilization



REPORT NUMBER: P300714

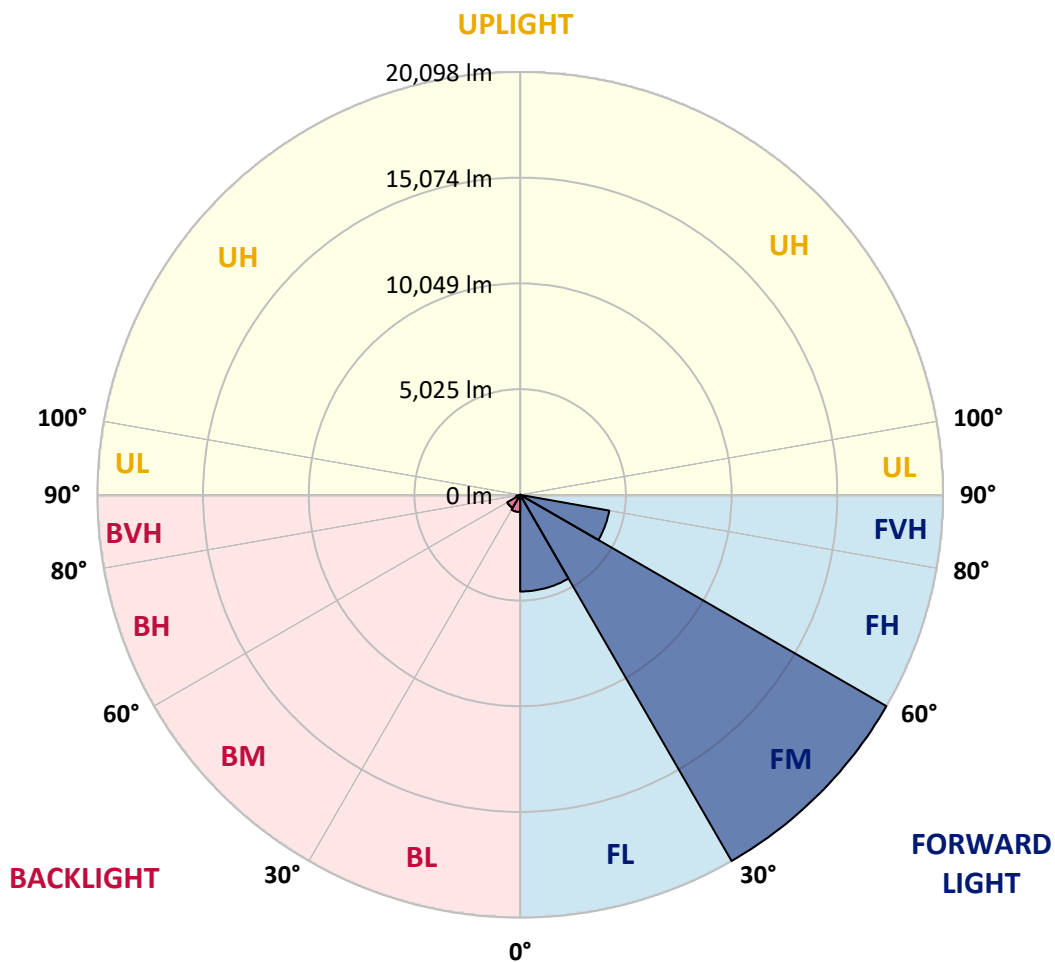
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4595.9	14.9			
FM (30°-60°)	20098.4	65.3			
FH (60°-80°)	4298.3	14.0			G2/5000
FVH (80°-90°)	44.9	0.1			G1/100
BL (0°-30°)	819.9	2.7	B2/1000		
BM (30°-60°)	712.9	2.3	B1/1000		
BH (60°-80°)	184.0	0.6	B1/500		G1/500
BVH (80°-90°)	0.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





REPORT NUMBER: P300714

CATALOG NUMBER: GLNA-AF-10-LED-E1-AFL-7027-800-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	8657.5	8657.5	8657.5	8657.5	8657.5	8657.5	8657.5	8657.5	8657.5	8657.5	8657.5
2.5°	10243.8	10134.9	10102.2	10080.5	9980.6	9855.4	9684.8	9604.9	9441.6	9178.4	8855.3
5°	11182.2	11162.2	11089.6	11049.7	10942.6	10764.7	10492.5	10361.8	10102.2	9659.4	9080.4
7.5°	10772.0	10897.2	10997.0	11164.0	11374.5	11367.3	11138.6	11002.5	10712.1	10127.6	9330.9
10°	9187.5	9289.1	9452.5	9831.8	10605.0	11287.4	11556.0	11458.0	11225.7	10557.8	9572.3
12.5°	8877.1	8866.2	8895.3	9006.0	9410.7	10383.6	11485.3	11683.1	11635.9	10951.6	9800.9
15°	9042.3	9029.6	9025.9	9064.1	9162.1	9572.3	10953.5	11521.6	11886.4	11316.5	9995.1
17.5°	9505.1	9450.7	9421.6	9390.8	9361.7	9463.4	10314.6	11069.6	11924.5	11635.9	10156.7
20°	10298.3	10207.5	10100.4	9926.2	9762.8	9712.0	10046.0	10605.0	11788.4	11879.1	10262.0
22.5°	11294.7	11178.5	10993.4	10675.8	10343.6	10151.2	10178.5	10458.0	11585.1	12144.1	10311.0
25°	12414.5	12265.7	12018.9	11577.8	11089.6	10748.4	10570.5	10668.5	11492.5	12454.5	10367.2
27.5°	13614.2	13449.1	13126.0	12525.2	11971.7	11510.7	11147.7	11135.0	11650.4	12861.0	10458.0
30°	14803.1	14777.6	14356.6	13721.3	12988.1	12427.2	11904.5	11837.4	12091.5	13423.7	10637.7
32.5°	16389.4	16198.8	15683.3	15029.9	14184.1	13510.8	12891.9	12735.8	12768.5	14078.9	10915.3
35°	18389.5	18180.8	17454.8	16552.7	15607.1	14812.1	14127.9	13915.5	13835.7	15151.5	11383.6
37.5°	19681.7	19678.1	19222.6	18304.2	17289.6	16413.0	15668.8	15420.2	15258.6	16447.4	12109.6
40°	19716.2	19801.5	19861.4	19852.4	19130.0	18322.3	17661.7	17354.9	16979.2	18178.9	13048.0
42.5°	18658.1	18877.7	19405.9	20302.5	20730.8	20409.6	19852.4	19551.1	18992.1	20032.0	14191.4
45°	17227.9	17380.3	18304.2	19955.8	21598.4	22478.6	22053.9	21514.9	20778.0	21965.0	15216.9
47.5°	16587.2	16614.4	17211.5	19024.7	21663.7	24173.8	24431.6	23554.9	22400.6	23522.3	16019.1
50°	14672.4	14721.4	15545.4	17411.2	20897.8	24974.3	26820.1	25988.8	24170.2	24722.0	16311.3
52.5°	11058.7	11127.7	12173.1	14759.5	18792.4	24633.0	28529.8	28328.4	26108.6	25308.2	16327.6
55°	6524.9	6615.6	7613.9	9935.3	14781.3	22462.3	28656.9	29397.4	27638.7	25654.9	16302.2
57.5°	3047.4	3110.9	3682.6	5118.3	9192.9	17752.4	26743.9	28664.1	28482.6	25838.2	16481.9
60°	1619.0	1637.1	1775.1	2216.1	4154.5	11256.6	23010.4	25883.6	27713.1	26092.3	16701.5
62.5°	1237.8	1243.3	1236.0	1288.6	1746.0	4996.7	17393.0	21278.9	24614.9	25901.7	16458.3
65°	1072.7	1081.7	1030.9	1018.2	1119.8	1782.3	10332.7	15167.9	19342.3	23329.9	14801.2
67.5°	961.9	965.6	903.9	851.2	869.4	963.8	4076.5	8303.6	12802.9	17100.8	10728.4
70°	885.7	882.1	814.9	731.4	707.8	658.8	1295.9	3043.7	6118.3	8672.0	4989.4
72.5°	784.1	785.9	753.2	644.3	588.1	461.0	600.8	887.5	1825.9	2363.1	1168.9
75°	695.1	686.1	646.1	577.2	484.6	303.1	297.7	395.7	562.6	559.0	252.3
77.5°	502.8	493.7	506.4	473.7	372.1	196.0	148.8	190.6	228.7	221.4	70.8
80°	368.4	363.0	326.7	393.9	328.5	134.3	92.6	101.6	118.0	99.8	21.8
82.5°	252.3	250.5	230.5	217.8	186.9	81.7	58.1	63.5	76.2	56.3	10.9
85°	39.9	45.4	167.0	132.5	110.7	36.3	39.9	43.6	50.8	30.9	3.6
87.5°	0.0	0.0	78.0	69.0	21.8	14.5	23.6	25.4	25.4	16.3	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



REPORT NUMBER: P300714

CATALOG NUMBER: GLNA-AF-10-LED-E1-AFL-7027-800-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8657.5	8657.5	8657.5	8657.5	8657.5	8657.5	8657.5	8657.5	8657.5	8657.5	8657.5
2.5°	8690.2	8508.7	8172.9	7826.2	7505.0	7122.0	6858.8	6661.0	6432.3	6370.6	6504.9
5°	8750.1	8407.0	7684.7	6898.8	6160.1	5341.5	4715.3	4219.9	3771.5	3619.1	3757.0
7.5°	8844.4	8334.4	7156.5	5862.4	4577.4	3299.7	2424.8	1849.5	1482.8	1373.9	1432.0
10°	8938.8	8229.2	6544.9	4635.5	2878.6	1606.3	1045.4	834.9	756.9	740.5	749.6
12.5°	9016.9	8087.6	5798.9	3296.0	1539.1	860.3	684.3	649.8	638.9	638.9	642.5
15°	9064.1	7873.4	4915.0	2096.3	885.7	649.8	597.1	586.2	586.2	588.1	591.7
17.5°	9058.6	7601.2	3947.6	1268.7	662.5	575.4	544.5	535.4	533.6	537.2	539.1
20°	8991.5	7245.4	2976.6	836.7	577.2	524.5	493.7	477.3	475.5	479.2	482.8
22.5°	8864.4	6806.2	2129.0	644.3	520.9	475.5	437.4	422.9	422.9	426.5	430.2
25°	8710.1	6269.0	1455.6	546.3	470.1	422.9	386.6	373.9	377.5	386.6	388.4
27.5°	8517.7	5664.6	989.2	468.3	408.4	370.3	343.0	334.0	343.0	355.7	359.4
30°	8352.6	5034.8	706.0	404.7	346.7	319.4	303.1	303.1	315.8	339.4	344.8
32.5°	8225.5	4424.9	544.5	357.6	301.3	277.7	268.6	277.7	297.7	321.3	326.7
35°	8209.2	3922.2	461.0	319.4	268.6	245.0	241.4	257.7	277.7	295.8	299.5
37.5°	8334.4	3457.6	415.6	288.6	239.6	217.8	214.2	234.1	254.1	275.9	281.3
40°	8572.2	3092.7	383.0	259.5	216.0	192.4	185.1	199.6	226.9	255.9	263.2
42.5°	8880.7	2791.5	346.7	230.5	192.4	159.7	150.6	167.0	196.0	226.9	235.9
45°	9174.8	2531.9	306.7	197.8	161.5	123.4	119.8	141.6	156.1	186.9	194.2
47.5°	9336.3	2303.2	272.2	161.5	125.2	99.8	99.8	105.3	119.8	156.1	163.3
50°	9281.9	2119.9	235.9	119.8	87.1	76.2	76.2	74.4	96.2	125.2	130.7
52.5°	9173.0	2014.6	203.3	92.6	59.9	54.4	49.0	54.4	67.2	79.9	81.7
55°	9156.6	1996.5	170.6	74.4	41.7	36.3	27.2	27.2	27.2	25.4	21.8
57.5°	9283.7	2025.5	143.4	59.9	30.9	23.6	14.5	0.0	0.0	0.0	0.0
60°	9414.4	2056.4	123.4	41.7	21.8	12.7	1.8	0.0	0.0	0.0	0.0
62.5°	9196.6	1987.4	103.5	25.4	16.3	5.4	0.0	0.0	0.0	0.0	0.0
65°	8078.5	1691.6	81.7	18.1	10.9	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	5746.3	1132.6	54.4	10.9	1.8	0.0	0.0	0.0	0.0	0.0	0.0
70°	2622.7	473.7	34.5	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	560.8	147.0	23.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	114.3	107.1	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	36.3	168.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	21.8	121.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	3.6	18.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	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)