

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: P190937

Luminaire Tested: **GLEON-AF-09-LED-E1-AFL-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P190937  
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: GLEON-AF-09-LED-E1-AFL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 4000K, 1050mA 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: 44562.8 lumens  
Efficiency: N/A  
Efficacy: 88.9 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3

Input Watts (W): 501  
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

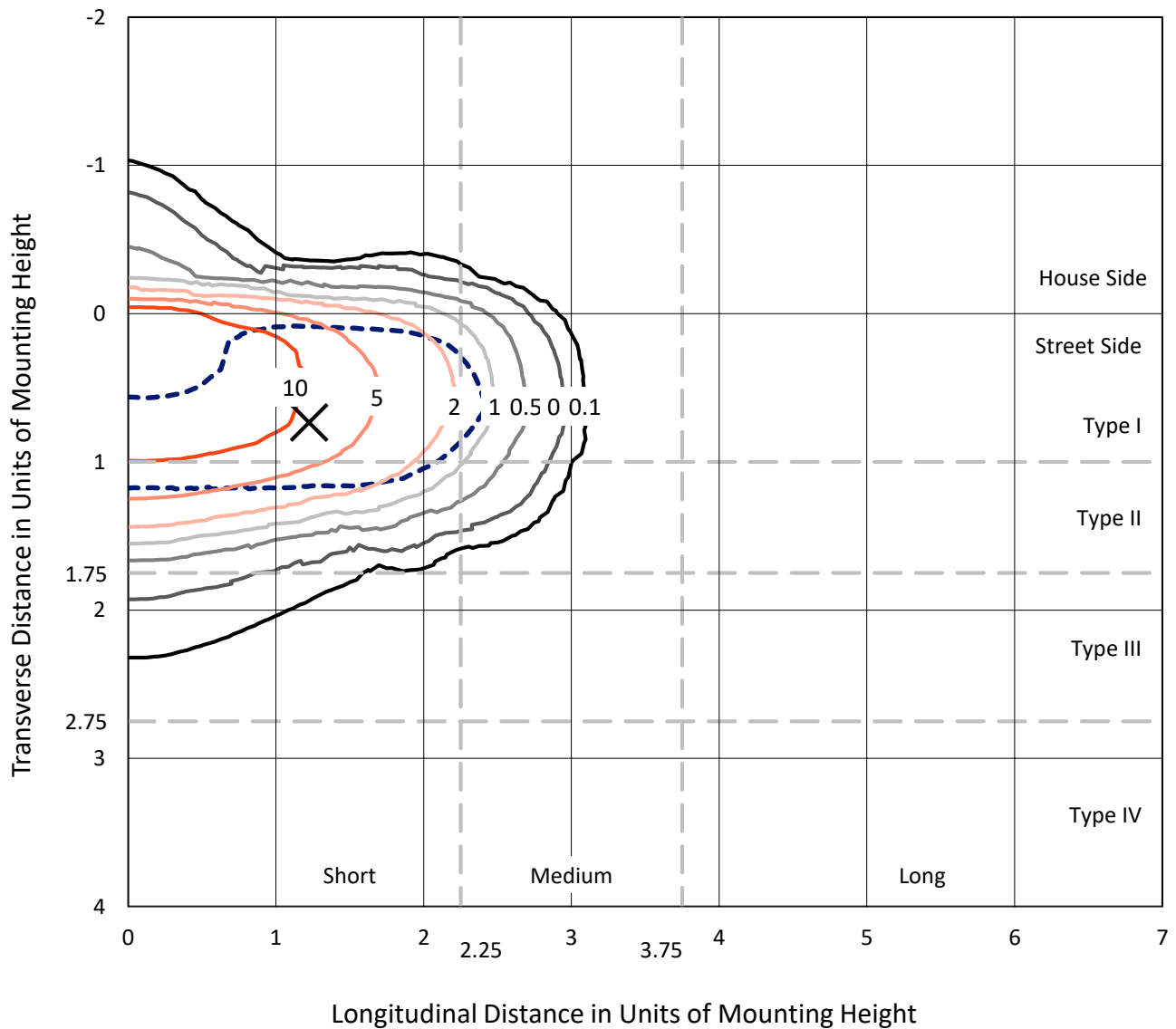


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

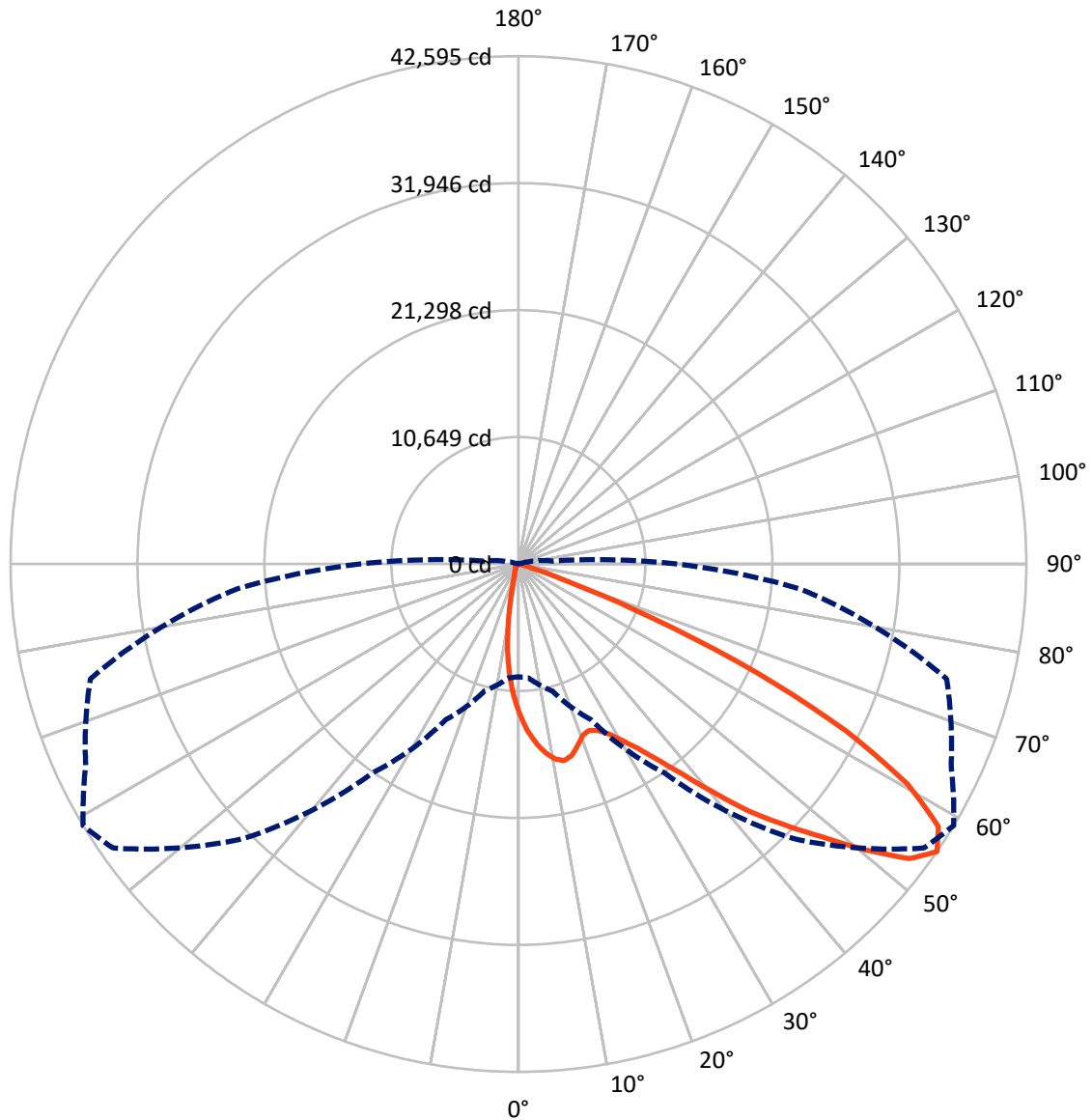


Based on 30 foot mounting height. Maximum calculated value = 17.3 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



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

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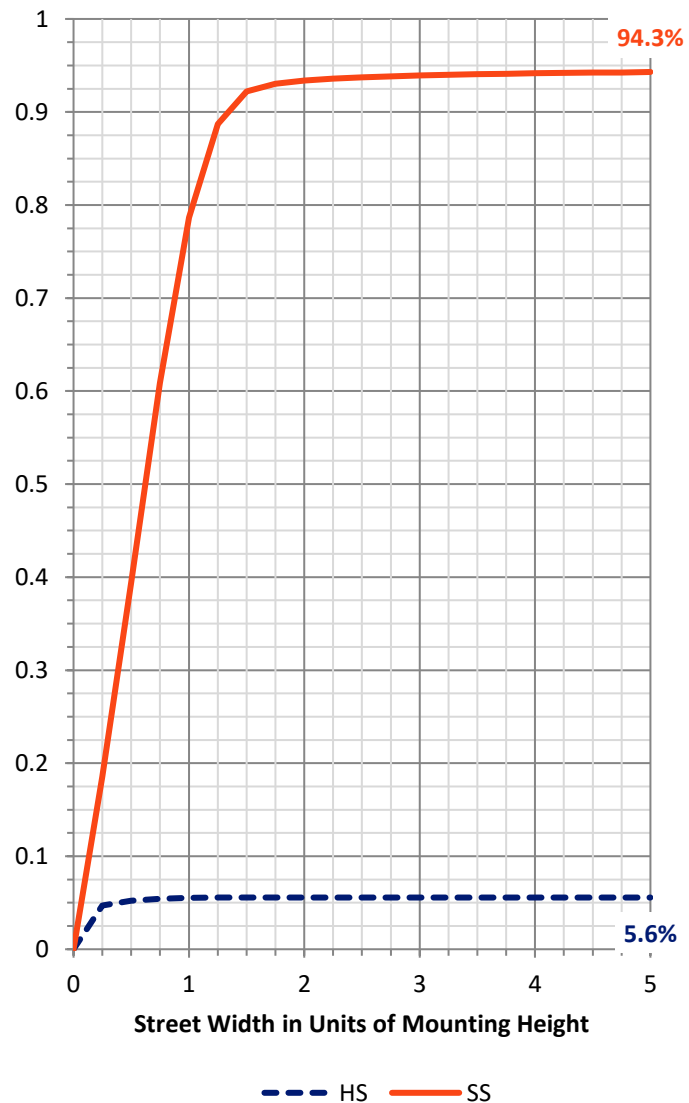
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2489.1	0.0	2489.1
	% Fixture	5.6	0.0	5.6
<b>Street Side</b>	Lumens	42073.7	0.0	42073.7
	% Fixture	94.4	0.0	94.4
<b>Total</b>	Lumens	44562.8	0.0	44562.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1050.7	2.4
10°-20°	2515.7	5.6
20°-30°	4280.8	9.6
30°-40°	7362.0	16.5
40°-50°	11366.1	25.5
50°-60°	11426.5	25.6
60°-70°	5859.6	13.1
70°-80°	635.0	1.4
80°-90°	66.4	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°	44562.8	100.0
0°-180°	44562.8	100.0



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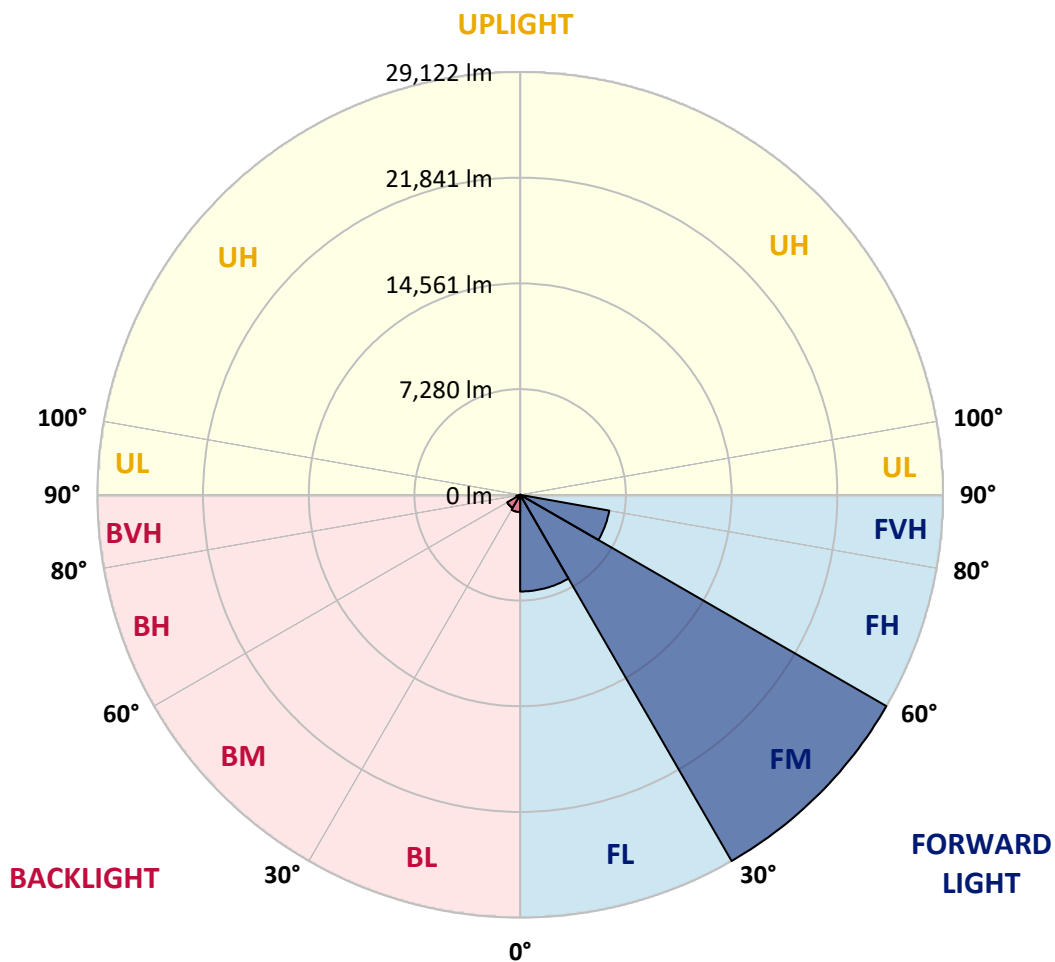
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6659.1	14.9			
FM (30°-60°)	29121.6	65.3			
FH (60°-80°)	6228.0	14.0			G3/7500
FVH (80°-90°)	65.0	0.1			G1/100
BL (0°-30°)	1188.0	2.7	B3/2500		
BM (30°-60°)	1033.0	2.3	B2/2500		
BH (60°-80°)	266.7	0.6	B1/500		G1/500
BVH (80°-90°)	1.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	12544.2	12544.2	12544.2	12544.2	12544.2	12544.2	12544.2	12544.2	12544.2	12544.2	12544.2
2.5°	14842.7	14685.0	14637.6	14606.1	14461.5	14280.0	14032.7	13917.0	13680.3	13299.1	12830.9
5°	16202.3	16173.5	16068.2	16010.4	15855.2	15597.5	15203.0	15013.6	14637.6	13995.9	13157.0
7.5°	15608.0	15789.5	15934.1	16176.0	16481.1	16470.6	16139.2	15942.0	15521.2	14674.4	13519.9
10°	13312.2	13459.5	13696.1	14245.7	15366.1	16354.9	16744.1	16602.1	16265.4	15297.7	13869.7
12.5°	12862.5	12846.7	12888.8	13049.2	13635.6	15045.3	16641.6	16928.2	16859.8	15868.3	14201.0
15°	13101.7	13083.3	13078.1	13133.4	13275.3	13869.7	15871.0	16694.1	17222.7	16397.0	14482.4
17.5°	13772.4	13693.5	13651.4	13606.7	13564.6	13711.9	14945.3	16039.4	17277.9	16859.8	14716.5
20°	14921.7	14790.1	14634.9	14382.5	14145.9	14072.2	14556.1	15366.1	17080.7	17212.2	14869.0
22.5°	16365.4	16197.1	15928.9	15468.7	14987.4	14708.6	14748.1	15153.1	16786.2	17596.2	14940.0
25°	17988.0	17772.3	17414.7	16775.7	16068.2	15573.8	15316.1	15458.1	16652.1	18045.9	15021.5
27.5°	19726.3	19487.0	19018.9	18148.5	17346.4	16678.4	16152.4	16134.0	16880.8	18635.0	15153.1
30°	21448.8	21412.0	20801.9	19881.5	18819.0	18006.4	17249.0	17151.7	17519.9	19450.2	15413.4
32.5°	23747.3	23471.2	22724.3	21777.6	20552.1	19576.4	18679.7	18453.5	18500.8	20399.6	15815.7
35°	26645.4	26342.9	25291.0	23984.0	22613.9	21462.0	20470.6	20162.9	20047.2	21953.8	16494.3
37.5°	28517.8	28512.6	27852.5	26521.8	25051.8	23781.6	22703.3	22343.0	22108.9	23831.5	17546.2
40°	28567.8	28691.4	28778.2	28765.1	27718.4	26548.1	25590.9	25146.4	24602.1	26340.4	18905.8
42.5°	27034.6	27352.8	28118.1	29417.2	30037.8	29572.4	28765.1	28328.5	27518.5	29025.4	20562.6
45°	24962.4	25183.2	26521.8	28914.9	31294.9	32570.3	31955.0	31173.9	30106.3	31826.1	22048.5
47.5°	24034.0	24073.4	24938.6	27565.9	31389.6	35026.7	35400.1	34129.8	32457.3	34082.6	23210.9
50°	21259.5	21330.5	22524.5	25227.9	30279.9	36186.4	38861.0	37656.5	35021.4	35820.9	23634.3
52.5°	16023.5	16123.4	17638.2	21385.7	27229.2	35692.0	41338.3	41046.3	37830.1	36670.3	23657.9
55°	9454.2	9585.8	11032.1	14395.7	21417.3	32546.7	41522.3	42595.3	40047.0	37172.6	23621.1
57.5°	4415.5	4507.5	5335.9	7416.1	13320.0	25722.3	38750.5	41532.8	41269.8	37438.2	23881.4
60°	2345.8	2372.1	2572.0	3211.0	6019.7	16310.1	33340.9	37503.9	40154.8	37806.4	24199.6
62.5°	1793.5	1801.4	1790.9	1867.2	2529.9	7239.9	25201.6	30832.0	35665.7	37530.2	23847.2
65°	1554.3	1567.4	1493.7	1475.3	1622.6	2582.4	14971.6	21977.5	28026.1	33803.8	21446.3
67.5°	1393.8	1399.1	1309.7	1233.4	1259.7	1396.4	5906.6	12031.4	18550.8	24778.2	15544.9
70°	1283.4	1278.1	1180.8	1059.8	1025.6	954.6	1877.7	4410.2	8865.1	12565.3	7229.4
72.5°	1136.1	1138.7	1091.4	933.5	852.0	668.0	870.4	1286.0	2645.6	3424.0	1693.6
75°	1007.2	994.1	936.2	836.3	702.2	439.2	431.3	573.3	815.3	810.0	365.5
77.5°	728.4	715.3	733.8	686.4	539.1	284.0	215.6	276.1	331.3	320.8	102.6
80°	533.9	526.0	473.3	570.7	476.0	194.6	134.1	147.3	170.9	144.6	31.5
82.5°	365.5	362.9	334.0	315.6	270.9	118.4	84.2	92.1	110.5	81.5	15.8
85°	57.9	65.8	241.9	192.0	160.4	52.6	57.9	63.1	73.7	44.7	5.2
87.5°	0.0	0.0	113.0	99.9	31.5	21.1	34.2	36.8	36.8	23.6	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



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	12544.2	12544.2	12544.2	12544.2	12544.2	12544.2	12544.2	12544.2	12544.2	12544.2	12544.2
2.5°	12591.6	12328.6	11842.1	11339.8	10874.4	10319.4	9938.1	9651.4	9320.1	9230.7	9425.3
5°	12678.4	12181.4	11134.7	9996.0	8925.7	7739.5	6832.3	6114.4	5464.8	5243.9	5443.7
7.5°	12815.1	12076.1	10369.4	8494.4	6632.4	4781.1	3513.4	2679.8	2148.6	1990.8	2075.0
10°	12951.9	11923.6	9483.2	6716.6	4170.9	2327.4	1514.8	1209.7	1096.6	1073.0	1086.2
12.5°	13065.0	11718.5	8402.3	4775.7	2230.1	1246.6	991.4	941.5	925.7	925.7	931.0
15°	13133.4	11408.2	7121.6	3037.4	1283.4	941.5	865.2	849.5	849.5	852.0	857.3
17.5°	13125.5	11013.7	5719.8	1838.2	959.9	833.7	788.9	775.8	773.1	778.5	781.0
20°	13028.2	10498.2	4313.0	1212.3	836.3	760.1	715.3	691.6	689.1	694.3	699.5
22.5°	12844.1	9861.9	3084.8	933.5	754.7	689.1	633.8	612.7	612.7	618.0	623.3
25°	12620.6	9083.4	2109.1	791.6	681.1	612.7	560.2	541.8	547.0	560.2	562.8
27.5°	12341.8	8207.6	1433.3	678.5	591.7	536.4	497.1	483.9	497.1	515.5	520.7
30°	12102.4	7295.2	1023.1	586.5	502.3	462.9	439.2	439.2	457.6	491.7	499.7
32.5°	11918.4	6411.5	788.9	518.1	436.6	402.3	389.2	402.3	431.3	465.4	473.3
35°	11894.7	5683.0	668.0	462.9	389.2	355.1	349.7	373.5	402.3	428.6	433.9
37.5°	12076.1	5009.8	602.2	418.2	347.1	315.6	310.4	339.2	368.2	399.8	407.6
40°	12420.7	4481.2	554.8	376.0	312.9	278.8	268.2	289.3	328.8	370.8	381.4
42.5°	12867.7	4044.6	502.3	334.0	278.8	231.4	218.3	241.9	284.0	328.8	341.9
45°	13293.8	3668.6	444.5	286.6	234.1	178.8	173.6	205.1	226.2	270.9	281.4
47.5°	13527.8	3337.3	394.4	234.1	181.5	144.6	144.6	152.5	173.6	226.2	236.7
50°	13448.9	3071.6	341.9	173.6	126.2	110.5	110.5	107.8	139.4	181.5	189.3
52.5°	13291.1	2919.1	294.5	134.1	86.7	78.9	71.0	78.9	97.3	115.7	118.4
55°	13267.5	2892.8	247.2	107.8	60.5	52.6	39.5	39.5	39.5	36.8	31.5
57.5°	13451.6	2934.8	207.8	86.7	44.7	34.2	21.1	0.0	0.0	0.0	0.0
60°	13640.9	2979.5	178.8	60.5	31.5	18.4	2.7	0.0	0.0	0.0	0.0
62.5°	13325.4	2879.7	149.9	36.8	23.6	7.9	0.0	0.0	0.0	0.0	0.0
65°	11705.3	2451.0	118.4	26.3	15.8	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	8326.0	1641.0	78.9	15.8	2.7	0.0	0.0	0.0	0.0	0.0	0.0
70°	3800.1	686.4	49.9	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	812.6	213.0	34.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	165.7	155.2	13.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	52.6	244.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	31.5	176.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	5.2	26.3	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)