

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: P456160

Luminaire Tested: **GALN-SA7B-827-U-T4FT-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456160
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-29)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA7B-827-U-T4FT-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20980 lumens
Efficiency: N/A
Efficacy: 73.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

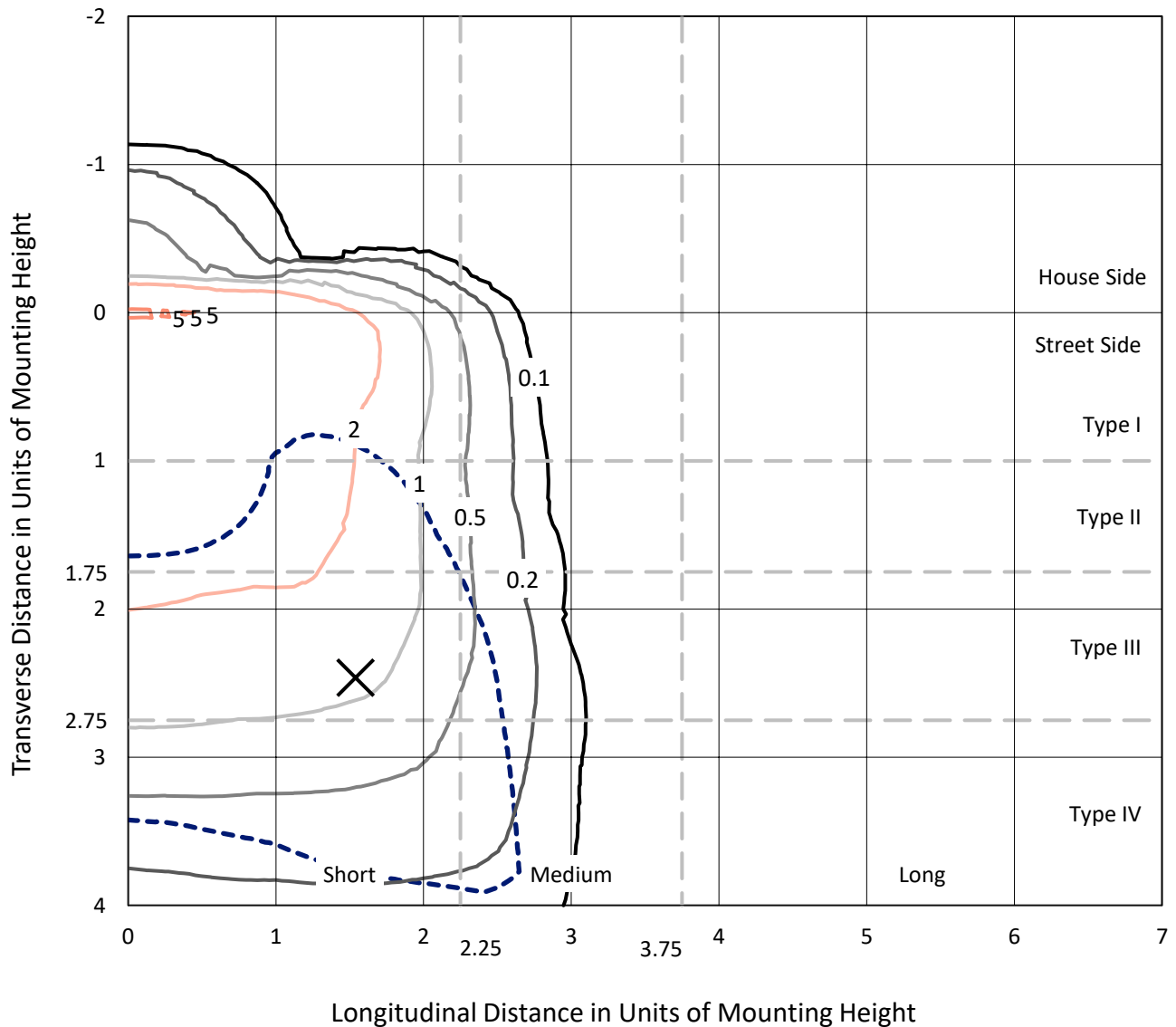
Input Watts (W): 286
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

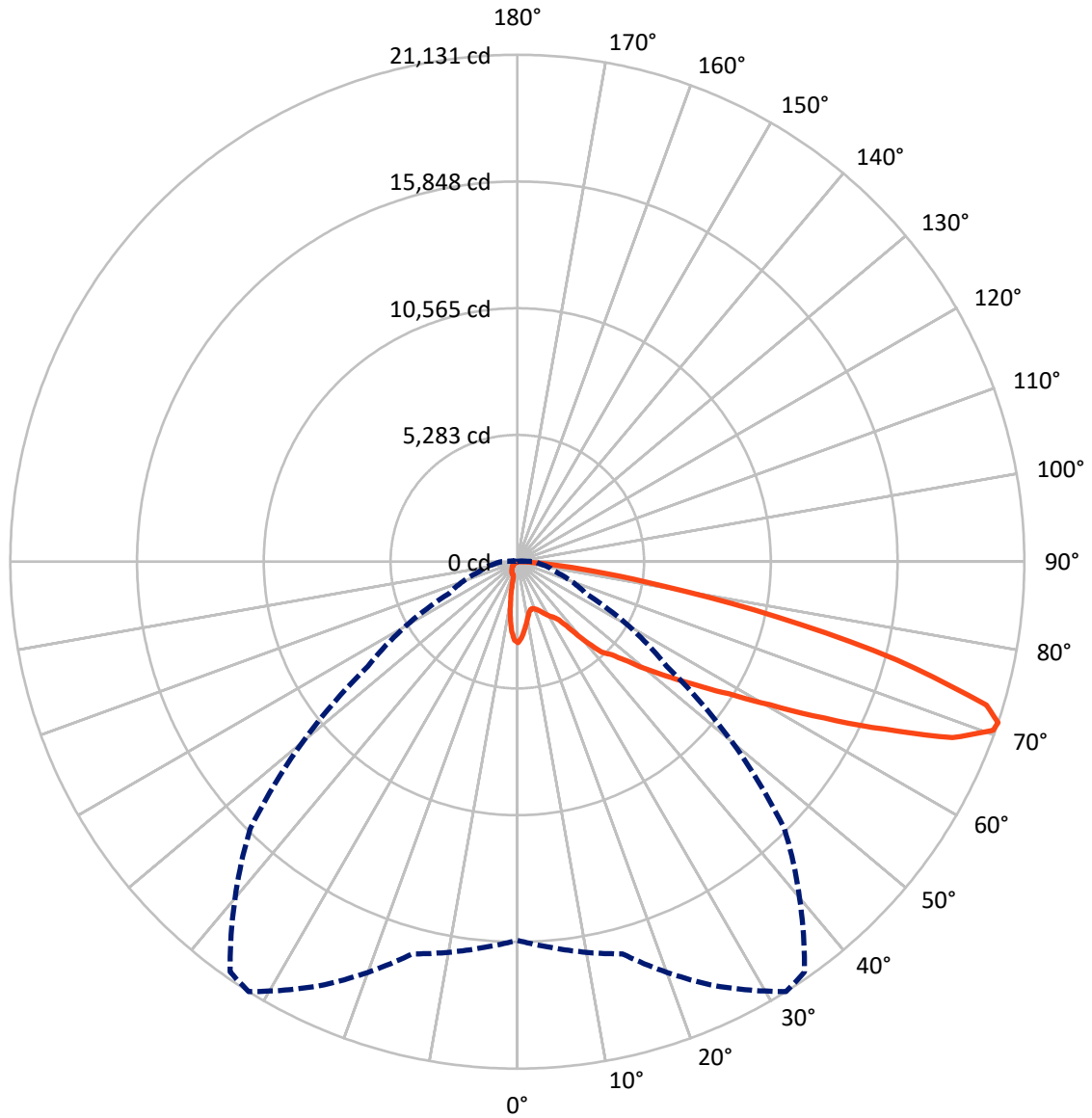
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 32-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical



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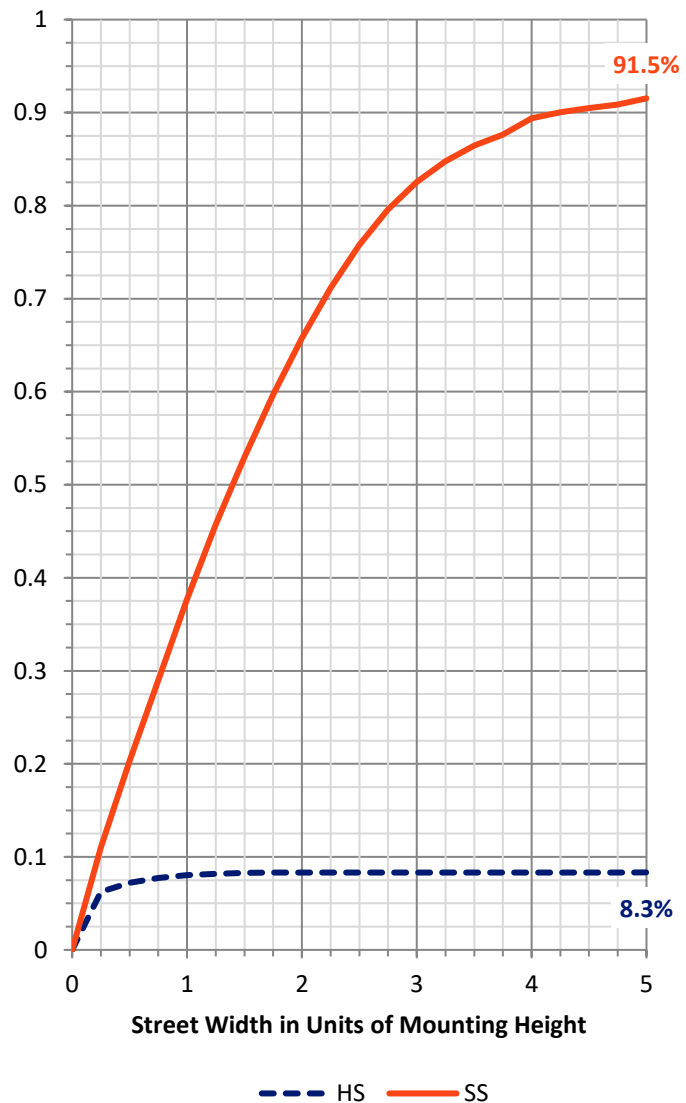
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1757.3	0.0	1757.3
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	19222.7	0.0	19222.7
	% Fixture	91.6	0.0	91.6
Total	Lumens	20980.0	0.0	20980.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.3	1.3
10°-20°	595.4	2.8
20°-30°	926.3	4.4
30°-40°	1543.2	7.4
40°-50°	2870.6	13.7
50°-60°	4608.8	22.0
60°-70°	6199.1	29.5
70°-80°	3678.0	17.5
80°-90°	284.3	1.4
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°	20980.0	100.0
0°-180°	20980.0	100.0



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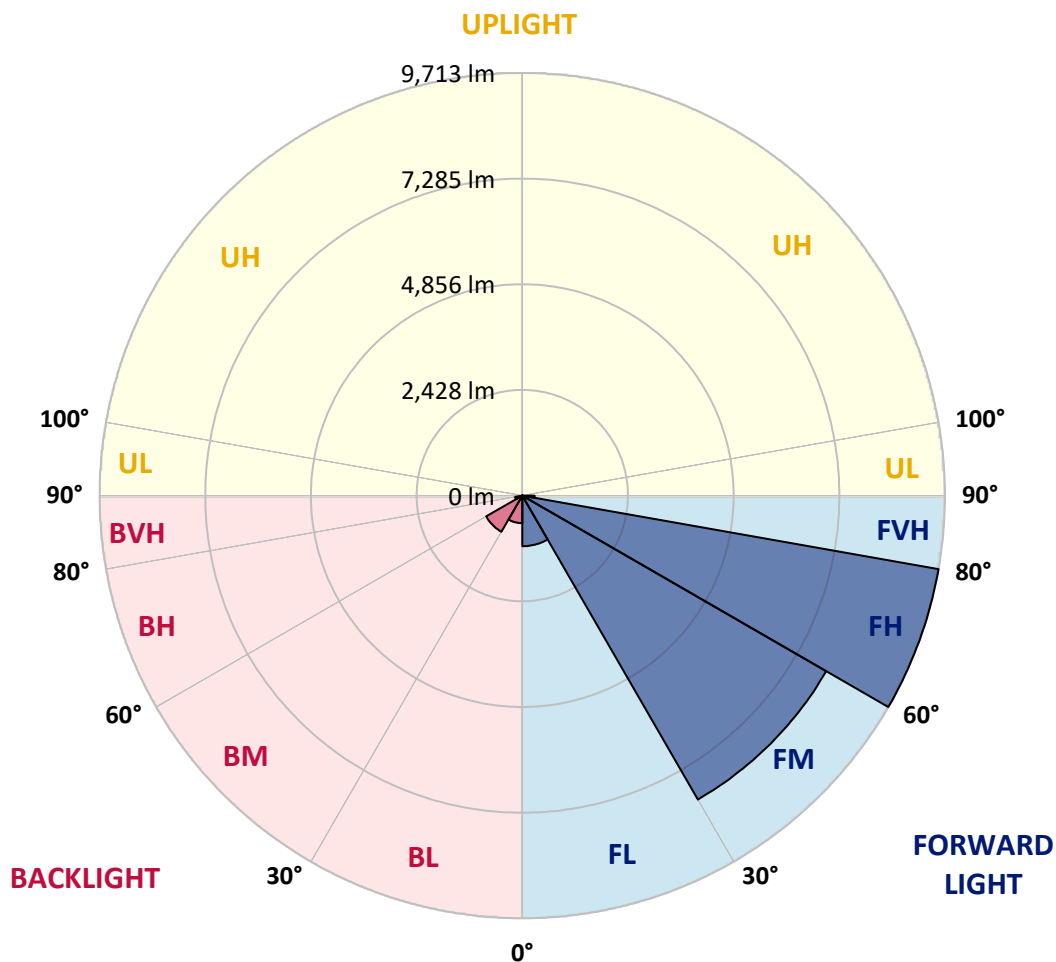
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1162.9	5.5			
FM (30°-60°)	8063.9	38.4			
FH (60°-80°)	9712.7	46.3			G4/12000
FVH (80°-90°)	283.2	1.3			G3/500
BL (0°-30°)	633.2	3.0	B2/1000		
BM (30°-60°)	958.6	4.6	B1/1000		
BH (60°-80°)	164.4	0.8	B1/500		G1/500
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: B2-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	32°	35°	45°	55°	65°	75°	85°
0°	3373.9	3373.9	3373.9	3373.9	3373.9	3373.9	3373.9	3373.9	3373.9	3373.9	3373.9
2.5°	3129.1	3161.3	3156.5	3167.8	3195.2	3206.4	3237.0	3270.8	3317.5	3349.8	3370.7
5°	2802.2	2826.4	2829.6	2885.9	2913.3	2943.9	3034.1	3132.3	3241.9	3328.8	3386.8
7.5°	2452.7	2465.6	2491.4	2565.5	2634.7	2665.3	2802.2	2972.9	3145.2	3307.9	3412.6
10°	2164.5	2179.0	2225.7	2304.6	2369.0	2409.2	2599.3	2813.5	3055.0	3296.6	3449.6
12.5°	2000.2	2008.2	2026.0	2096.8	2179.0	2222.4	2427.0	2671.8	2982.6	3301.4	3512.4
15°	1988.9	1985.7	1964.8	1993.7	2067.8	2112.9	2312.6	2575.1	2918.2	3317.5	3586.5
17.5°	2048.5	2040.5	1990.5	1990.5	2051.7	2088.8	2264.3	2523.6	2885.9	3354.6	3691.2
20°	2140.3	2127.4	2045.3	2038.8	2098.4	2137.1	2293.3	2526.8	2892.4	3423.8	3831.3
22.5°	2256.3	2241.8	2117.8	2121.0	2185.4	2224.0	2377.0	2584.8	2932.6	3509.2	3981.1
25°	2407.6	2391.5	2245.0	2238.5	2306.2	2340.0	2501.0	2687.9	2989.0	3615.5	4177.5
27.5°	2608.9	2575.1	2399.6	2389.9	2462.4	2505.9	2650.8	2826.4	3088.9	3762.0	4441.6
30°	2774.8	2737.8	2570.3	2544.5	2621.8	2655.6	2805.4	3013.2	3285.3	4018.1	4807.2
32.5°	2992.2	2937.5	2741.0	2673.4	2755.5	2799.0	3029.3	3361.0	3576.8	4288.7	5242.0
35°	3481.8	3448.0	3208.0	2971.3	2966.5	3021.2	3359.4	3712.1	3876.4	4710.6	5834.7
37.5°	4182.4	4158.2	3903.8	3586.5	3494.7	3468.9	3760.4	4098.6	4354.7	5290.4	6524.0
40°	4995.6	4939.3	4705.8	4436.8	4317.6	4241.9	4233.9	4673.6	4979.5	6077.9	7242.2
42.5°	5578.6	5475.6	5192.1	5172.8	5147.0	5068.1	4839.4	5514.2	5786.4	6925.0	8010.4
45°	6190.6	6034.4	5612.4	5540.0	5530.3	5525.5	5754.2	6509.5	6665.7	7842.9	8799.5
47.5°	6665.7	6541.7	6195.4	6163.2	6203.5	6313.0	6963.6	7565.9	7533.7	8661.0	9461.4
50°	7298.6	7205.2	6820.3	6881.5	7089.2	7268.0	8327.7	8717.4	8247.2	9305.2	9943.0
52.5°	8045.9	7873.5	7516.0	7681.9	8000.8	8298.7	9775.5	9725.6	8748.0	9790.0	10302.1
55°	8693.3	8570.9	8448.5	8620.8	9097.5	9469.5	11083.2	10480.9	9112.0	10179.7	10459.9
57.5°	9788.4	9759.4	9633.8	9809.3	10387.5	10774.0	12254.0	11067.1	9345.5	10382.6	10274.7
60°	11408.5	11361.8	11128.3	11352.1	12105.8	12713.0	13333.0	11593.7	9398.6	10303.7	9741.7
62.5°	13357.1	13197.7	12998.0	13328.2	14362.1	14629.4	14349.2	11906.1	9200.6	9675.6	8456.5
65°	15177.0	15012.7	15017.5	15713.2	16839.0	17020.9	15534.5	11859.4	8620.8	8102.2	6237.3
67.5°	16570.0	16542.6	16739.1	18096.7	19568.7	19443.1	16594.2	11160.5	6902.4	5251.7	3314.3
70°	16640.9	16694.0	17257.7	19549.4	21043.9	20844.2	16504.0	9071.7	4303.1	2415.7	1306.1
71°	15784.1	16141.6	16921.1	19504.3	21130.8	20871.5	15743.8	7598.1	3156.5	1684.5	942.1
72.5°	13450.6	13639.0	15323.5	18356.0	20443.2	19889.2	13816.1	5325.8	2021.1	1030.7	541.1
75°	7408.1	7871.9	10261.8	14400.7	16351.0	15864.6	9004.1	2530.0	1008.1	563.7	223.9
77.5°	3526.9	3436.7	5006.9	8564.4	11086.4	11060.6	4536.7	1124.1	587.8	381.7	112.7
80°	1008.1	1133.8	1916.4	4071.2	6155.2	6222.8	1742.5	542.7	407.4	297.9	58.0
82.5°	304.4	310.8	703.8	1800.5	3061.5	2885.9	653.8	277.0	293.1	236.7	33.8
85°	53.1	66.0	207.7	634.5	1167.6	885.8	164.3	132.1	193.3	156.2	19.3
87.5°	3.2	4.8	69.2	72.5	103.1	59.6	29.0	19.3	41.9	41.9	11.3
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°	3373.9	3373.9	3373.9	3373.9	3373.9	3373.9	3373.9	3373.9	3373.9	3373.9	3373.9
2.5°	3385.2	3394.8	3388.4	3373.9	3349.8	3320.8	3282.1	3249.9	3222.5	3208.0	3225.7
5°	3406.1	3419.0	3386.8	3314.3	3204.8	3085.6	2950.4	2845.7	2763.5	2737.8	2728.1
7.5°	3438.3	3446.4	3359.4	3198.4	2966.5	2684.6	2438.2	2230.5	2069.4	2021.1	1950.3
10°	3480.2	3475.4	3311.1	3011.6	2604.1	2180.6	1798.9	1515.4	1301.3	1223.9	1217.5
12.5°	3544.6	3518.9	3249.9	2757.1	2172.5	1618.5	1146.6	897.0	761.7	716.7	707.0
15°	3625.1	3563.9	3153.3	2459.2	1663.6	1045.2	707.0	631.3	613.6	610.4	607.1
17.5°	3720.2	3623.5	3026.1	2093.6	1169.2	678.0	591.0	589.4	591.0	587.8	586.2
20°	3849.0	3686.3	2874.7	1660.4	773.0	571.7	563.7	563.7	565.3	563.7	563.7
22.5°	3985.9	3760.4	2687.9	1267.4	583.0	542.7	541.1	544.3	547.6	545.9	545.9
25°	4155.0	3857.0	2441.5	868.0	521.8	518.6	520.2	526.6	533.1	534.7	533.1
27.5°	4399.8	3976.2	2177.3	597.5	478.3	481.5	497.6	513.7	523.4	525.0	525.0
30°	4675.2	4108.3	1832.7	484.7	442.9	442.9	462.2	492.8	513.7	517.0	518.6
32.5°	5029.5	4261.3	1451.0	436.4	409.1	405.8	423.6	460.6	499.2	510.5	510.5
35°	5467.5	4441.6	1079.0	405.8	384.9	376.8	386.5	417.1	467.0	499.2	502.5
37.5°	5981.2	4612.4	789.1	378.5	362.4	351.1	357.5	381.7	421.9	470.3	483.1
40°	6456.3	4763.7	589.4	355.9	339.8	331.8	336.6	347.9	381.7	426.8	434.8
42.5°	6974.9	4881.3	468.6	331.8	317.3	314.0	314.0	318.9	341.4	367.2	368.8
45°	7491.9	4923.2	393.0	302.8	293.1	296.3	294.7	291.5	301.2	297.9	297.9
47.5°	7860.7	4873.2	325.3	275.4	275.4	280.2	272.2	260.9	256.1	236.7	238.3
50°	8113.5	4691.3	267.3	243.2	256.1	262.5	246.4	228.7	211.0	190.0	185.2
52.5°	8218.2	4367.6	219.0	201.3	227.1	235.1	215.8	194.9	167.5	149.8	144.9
55°	8150.5	3968.2	182.0	164.3	191.6	201.3	182.0	157.8	127.2	107.9	104.7
57.5°	7852.6	3491.5	154.6	130.4	153.0	159.4	146.6	120.8	90.2	70.9	70.9
60°	7337.3	2998.7	125.6	103.1	114.3	124.0	111.1	87.0	61.2	43.5	40.3
62.5°	6292.1	2435.0	101.5	80.5	80.5	88.6	77.3	62.8	38.7	22.5	20.9
65°	4543.1	1670.0	80.5	59.6	58.0	58.0	48.3	41.9	22.5	9.7	6.4
67.5°	2468.8	942.1	64.4	45.1	40.3	38.7	30.6	24.2	9.7	1.6	0.0
70°	971.1	362.4	49.9	30.6	25.8	24.2	16.1	11.3	6.4	0.0	0.0
71°	658.7	249.6	43.5	25.8	20.9	17.7	12.9	9.7	4.8	0.0	0.0
72.5°	376.8	154.6	33.8	19.3	16.1	12.9	9.7	6.4	4.8	0.0	0.0
75°	164.3	78.9	20.9	14.5	11.3	8.1	6.4	4.8	1.6	0.0	0.0
77.5°	83.7	43.5	14.5	11.3	6.4	4.8	3.2	1.6	0.0	0.0	0.0
80°	46.7	22.5	9.7	6.4	4.8	3.2	1.6	1.6	0.0	0.0	0.0
82.5°	25.8	12.9	4.8	3.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.1	8.1	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.1	3.2	0.0	0.0	0.0	0.0	1.6	1.6	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)