

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: STREETWORKS

Report Number: P258084

Luminaire Tested: **ARCH-L-AF72-280-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258084
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-280-D-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21306 lumens
Efficiency: N/A
Efficacy: 76.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G3

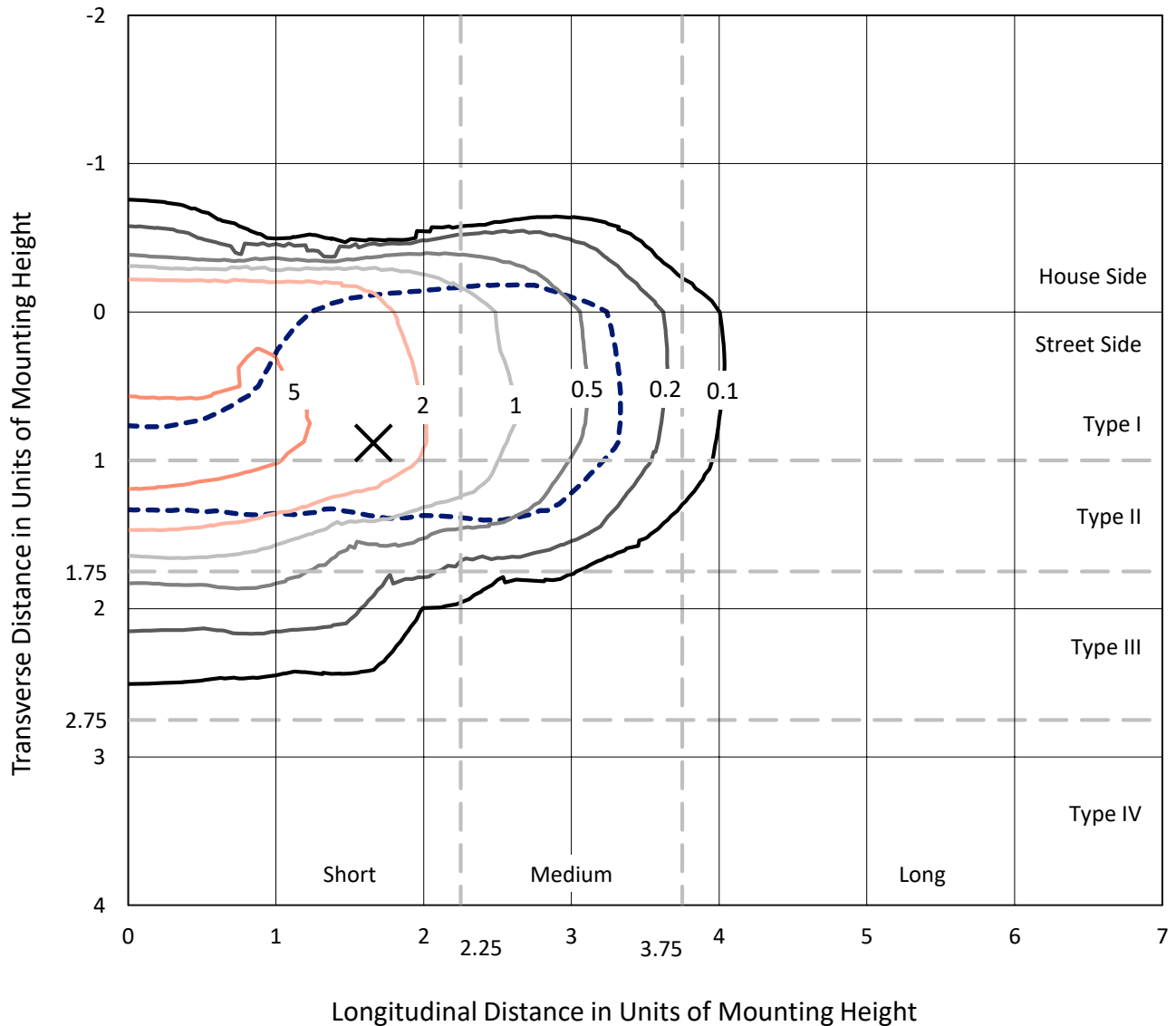
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

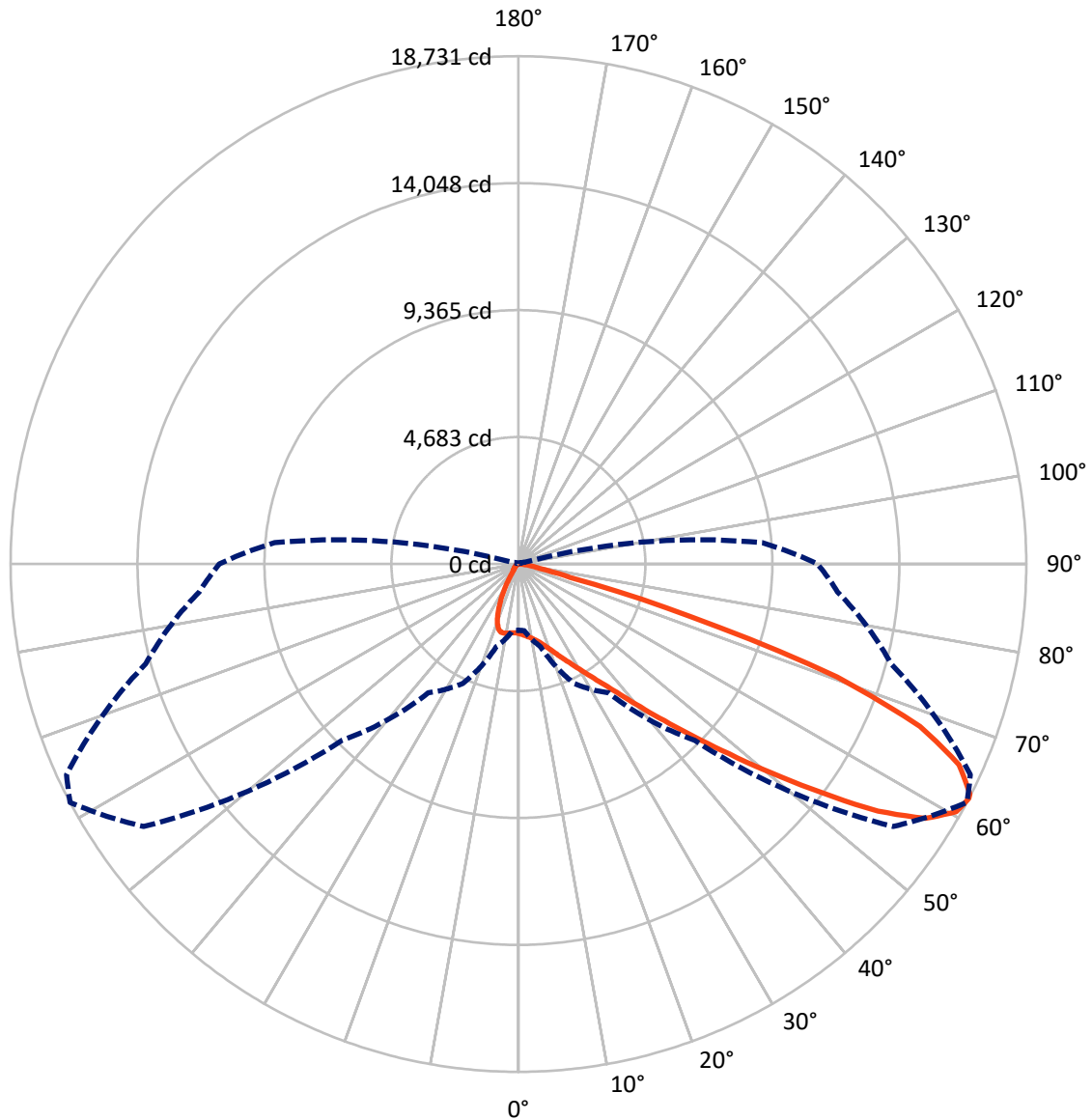
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

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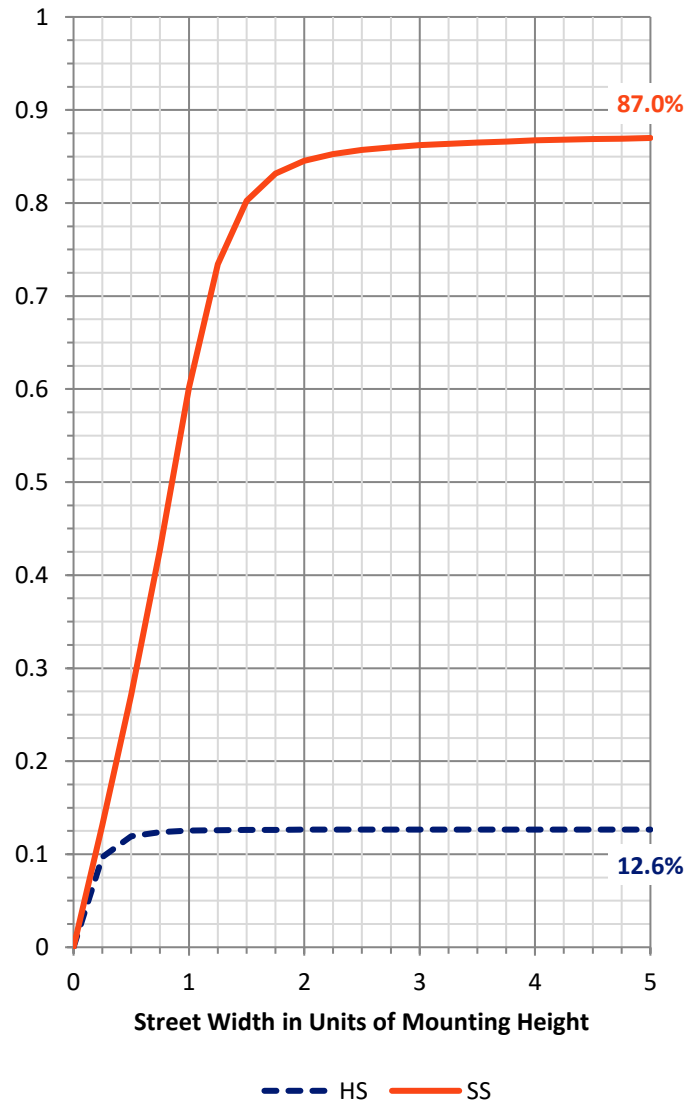
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2724.2	0.0	2724.2
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	18581.8	0.0	18581.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	21306.0	0.0	21306.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.0	1.2
10°-20°	689.7	3.2
20°-30°	1158.4	5.4
30°-40°	2220.5	10.4
40°-50°	4535.5	21.3
50°-60°	6002.0	28.2
60°-70°	4662.6	21.9
70°-80°	1683.0	7.9
80°-90°	107.3	0.5
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°	21306.0	100.0
0°-180°	21306.0	100.0

Coefficient of Utilization



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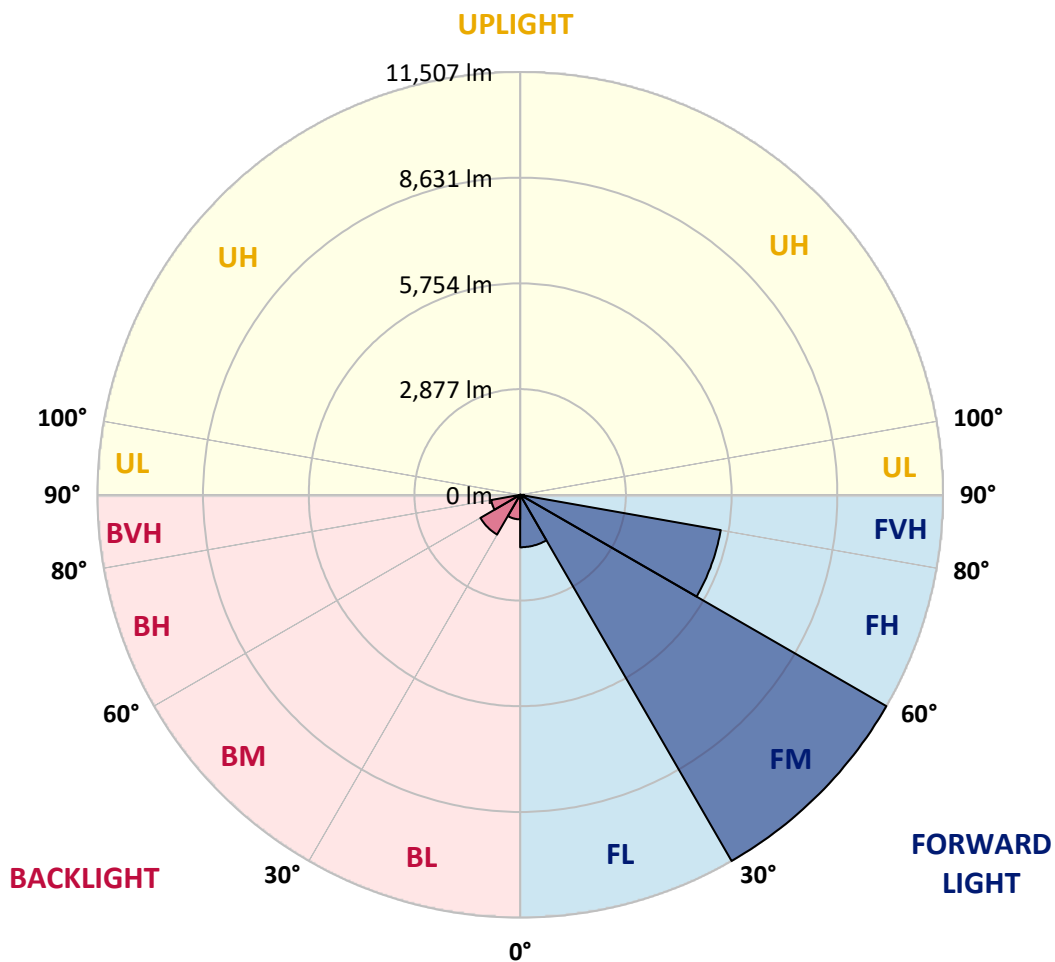
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1428.4	6.7			
FM	(30°-60°)	11507.4	54.0			
FH	(60°-80°)	5543.4	26.0			G3/7500
FVH	(80°-90°)	102.6	0.5			G2/225
BL	(0°-30°)	666.7	3.1	B2/1000		
BM	(30°-60°)	1250.6	5.9	B2/2500		
BH	(60°-80°)	802.2	3.8	B2/1000		G2/1000
BVH	(80°-90°)	4.7	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-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	2566.6	2566.6	2566.6	2566.6	2566.6	2566.6	2566.6	2566.6	2566.6	2566.6	2566.6
2.5°	2634.7	2629.4	2624.2	2619.0	2619.0	2613.7	2608.5	2598.0	2587.6	2577.0	2571.8
5°	2681.9	2676.6	2671.3	2676.6	2671.3	2671.3	2666.1	2655.7	2645.1	2629.4	2613.7
7.5°	2718.5	2713.3	2708.1	2713.3	2718.5	2723.7	2728.9	2718.5	2713.3	2692.3	2676.6
10°	2765.6	2760.4	2755.1	2765.6	2765.6	2791.8	2797.1	2791.8	2786.6	2770.9	2744.7
12.5°	2833.7	2839.0	2839.0	2849.4	2859.9	2891.4	2901.8	2886.1	2886.1	2865.2	2833.7
15°	2959.4	2959.4	2959.4	2969.9	2975.2	3017.1	3027.5	3011.8	3022.3	2985.6	2954.2
17.5°	3079.9	3085.1	3095.7	3116.5	3116.5	3153.2	3174.2	3174.2	3195.2	3148.0	3106.1
20°	3200.4	3205.6	3221.4	3268.4	3268.4	3315.6	3352.3	3368.0	3388.9	3341.8	3268.4
22.5°	3331.3	3331.3	3357.5	3430.9	3415.1	3509.4	3577.5	3603.7	3624.6	3561.8	3446.5
25°	3530.4	3509.4	3530.4	3598.4	3588.0	3718.9	3844.7	3870.8	3897.0	3823.7	3650.8
27.5°	3907.5	3876.1	3802.7	3807.9	3807.9	3959.8	4137.9	4174.7	4190.3	4127.5	3912.8
30°	4661.8	4661.8	4389.4	4206.1	4085.6	4221.8	4473.2	4536.1	4557.0	4462.7	4179.9
32.5°	5976.5	5976.5	5473.6	5007.4	4551.7	4551.7	4839.9	4955.1	4976.0	4866.1	4536.1
35°	7652.6	7642.2	6887.8	6248.9	5358.4	5023.2	5269.3	5463.2	5526.0	5379.4	4997.0
37.5°	9433.6	9365.4	8553.5	7820.3	6599.8	5777.4	5850.8	6107.4	6165.0	6044.6	5594.1
40°	10879.2	10800.6	10145.8	9533.1	8202.6	6982.2	6688.9	6924.6	6992.7	6825.0	6306.5
42.5°	12188.7	11994.9	11544.4	11104.4	10046.4	9066.8	7804.5	7898.8	7972.2	7794.1	7107.9
45°	13136.7	12838.1	12607.7	12471.5	11911.0	11355.9	9250.2	9061.6	9087.8	8867.9	7982.6
47.5°	13162.9	12953.4	12974.4	13330.6	13561.1	13540.1	11130.6	10460.2	10360.7	9994.0	8914.9
50°	11905.8	12026.3	12408.7	13424.8	14671.5	15425.7	13367.2	12115.3	11816.8	11156.8	9842.1
52.5°	9810.6	9999.2	10716.8	12429.6	14833.8	16667.1	15687.6	14006.2	13472.0	12309.2	10554.4
55°	7684.1	7694.5	8448.8	10193.0	13749.6	16892.3	17541.9	16085.7	15268.6	13183.9	11025.9
57.5°	5285.1	5573.1	6531.7	7705.0	11303.5	15771.4	18238.5	17699.0	16646.2	13723.4	11355.9
60°	3462.3	3478.0	4593.7	5950.3	7694.5	12832.9	17814.2	18552.7	17761.8	14042.9	11581.0
62°	2440.9	2467.1	3158.5	4860.8	5798.4	9197.9	16876.6	18730.8	18390.4	14231.5	11816.8
62.5°	2262.8	2283.7	2865.2	4588.4	5447.4	8249.8	16541.4	18688.9	18484.7	14294.3	11900.6
65°	1660.5	1660.5	1875.2	3153.2	3991.3	4457.5	14016.7	17856.1	18359.0	14797.2	12214.9
67.5°	1283.3	1293.7	1367.1	1943.3	3011.8	2702.7	8946.4	15980.9	17049.5	15541.0	12392.9
70°	1105.2	1100.0	1152.4	1288.5	2173.8	1796.6	3939.0	12471.5	14278.7	15352.3	12230.6
72.5°	817.1	822.4	942.9	1131.4	1513.8	1168.1	1780.9	6620.7	9260.7	12015.8	10481.2
75°	523.8	529.1	665.2	890.5	1089.4	764.8	1026.6	1974.7	3792.3	6662.7	6411.2
77.5°	351.0	361.4	434.8	623.3	953.3	476.7	644.3	827.6	1141.9	2498.5	2299.5
80°	235.7	235.7	277.6	419.0	602.3	398.1	345.7	549.9	591.9	775.2	387.6
82.5°	157.1	157.1	183.3	277.6	392.8	356.2	209.5	298.6	345.7	387.6	136.2
85°	94.3	94.3	125.7	172.9	256.7	199.1	136.2	167.7	178.1	246.2	73.3
87.5°	57.6	52.4	83.8	120.5	136.2	120.5	89.0	89.0	94.3	136.2	36.6
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°	2566.6	2566.6	2566.6	2566.6	2566.6	2566.6	2566.6	2566.6	2566.6	2566.6	2566.6
2.5°	2561.4	2556.1	2550.8	2540.4	2524.6	2514.2	2503.8	2493.2	2482.8	2482.8	2498.5
5°	2608.5	2592.8	2571.8	2550.8	2519.4	2498.5	2482.8	2461.8	2451.4	2451.4	2456.6
7.5°	2666.1	2650.4	2613.7	2577.0	2530.0	2493.2	2456.6	2409.5	2372.7	2357.1	2372.7
10°	2728.9	2708.1	2655.7	2598.0	2545.6	2451.4	2330.9	2184.2	2058.5	2000.9	2027.1
12.5°	2807.5	2781.3	2718.5	2639.9	2519.4	2289.0	1990.5	1649.9	1435.2	1335.7	1356.6
15°	2922.8	2886.1	2797.1	2676.6	2409.5	1911.9	1424.8	1031.9	832.8	749.0	759.5
17.5°	3058.9	3011.8	2891.4	2666.1	2126.6	1377.6	848.5	602.3	518.5	497.6	497.6
20°	3205.6	3142.7	2985.6	2587.6	1697.1	864.3	529.1	460.9	429.5	413.8	413.8
22.5°	3357.5	3273.7	3064.1	2404.2	1209.9	539.5	434.8	387.6	351.0	335.2	335.2
25°	3540.8	3430.9	3142.7	2084.7	770.0	434.8	371.8	324.8	288.1	267.1	272.4
27.5°	3755.6	3614.2	3210.8	1686.6	497.6	377.2	309.0	261.9	230.5	220.0	220.0
30°	3980.8	3813.3	3226.6	1262.3	403.3	324.8	256.7	214.7	193.8	183.3	183.3
32.5°	4289.8	4069.9	3179.4	838.1	340.4	272.4	214.7	178.1	162.3	157.1	157.1
35°	4698.4	4405.1	3069.5	518.5	288.1	225.3	178.1	157.1	141.5	136.2	136.2
37.5°	5216.9	4871.3	2875.6	356.2	246.2	183.3	151.9	136.2	125.7	120.5	120.5
40°	5908.4	5437.0	2624.2	309.0	209.5	157.1	130.9	120.5	110.0	110.0	110.0
42.5°	6641.7	6123.2	2299.5	272.4	178.1	136.2	115.2	104.8	99.5	94.3	94.3
45°	7443.1	6825.0	1896.1	240.9	151.9	120.5	104.8	89.0	83.8	83.8	83.8
47.5°	8239.3	7547.8	1456.2	209.5	130.9	104.8	89.0	78.6	73.3	68.1	68.1
50°	9056.4	8202.6	1068.6	183.3	115.2	94.3	78.6	68.1	57.6	52.4	52.4
52.5°	9648.3	8595.4	780.4	157.1	99.5	78.6	62.8	52.4	41.9	36.6	36.6
55°	10083.0	8836.4	570.9	130.9	89.0	68.1	52.4	41.9	31.4	31.4	26.2
57.5°	10423.5	8951.6	429.5	115.2	78.6	57.6	41.9	31.4	26.2	21.0	21.0
60°	10685.3	8956.9	319.5	94.3	68.1	47.2	31.4	21.0	15.8	15.8	15.8
62°	11031.1	9025.0	261.9	78.6	62.8	41.9	26.2	15.8	10.4	5.2	5.2
62.5°	11130.6	9051.2	251.4	78.6	57.6	36.6	21.0	15.8	10.4	5.2	5.2
65°	11591.6	9098.3	193.8	62.8	47.2	31.4	15.8	10.4	0.0	0.0	0.0
67.5°	12010.6	9025.0	141.5	47.2	36.6	21.0	15.8	5.2	0.0	0.0	0.0
70°	11968.7	8522.1	99.5	31.4	26.2	15.8	10.4	0.0	0.0	0.0	0.0
72.5°	9863.0	6379.8	68.1	26.2	15.8	10.4	5.2	0.0	0.0	0.0	0.0
75°	5955.5	2791.8	47.2	15.8	15.8	10.4	5.2	0.0	0.0	0.0	0.0
77.5°	1953.7	1010.9	31.4	10.4	10.4	5.2	5.2	0.0	0.0	0.0	0.0
80°	319.5	167.7	15.8	10.4	10.4	5.2	5.2	0.0	0.0	0.0	0.0
82.5°	99.5	41.9	10.4	10.4	5.2	5.2	0.0	0.0	0.0	0.0	0.0
85°	36.6	15.8	10.4	10.4	5.2	5.2	0.0	0.0	0.0	0.0	0.0
87.5°	15.8	10.4	10.4	10.4	5.2	5.2	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)