

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: P236981

Luminaire Tested: **ARCH-L-AF72-280-D-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236981
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-280-D-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24607.1 lumens
Efficiency: N/A
Efficacy: 88.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B1 - U0 - G3

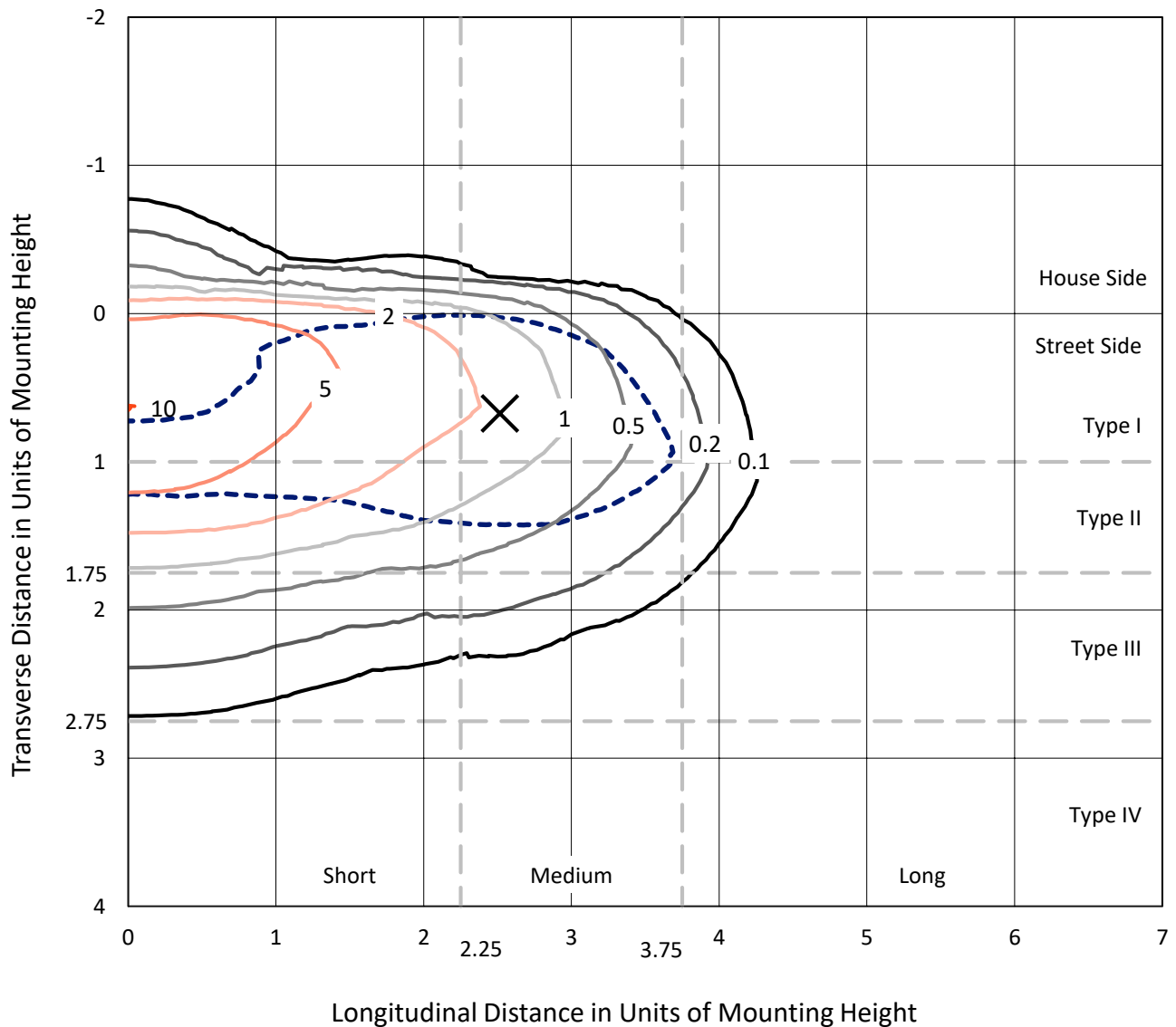
Input Watts (W): 279
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

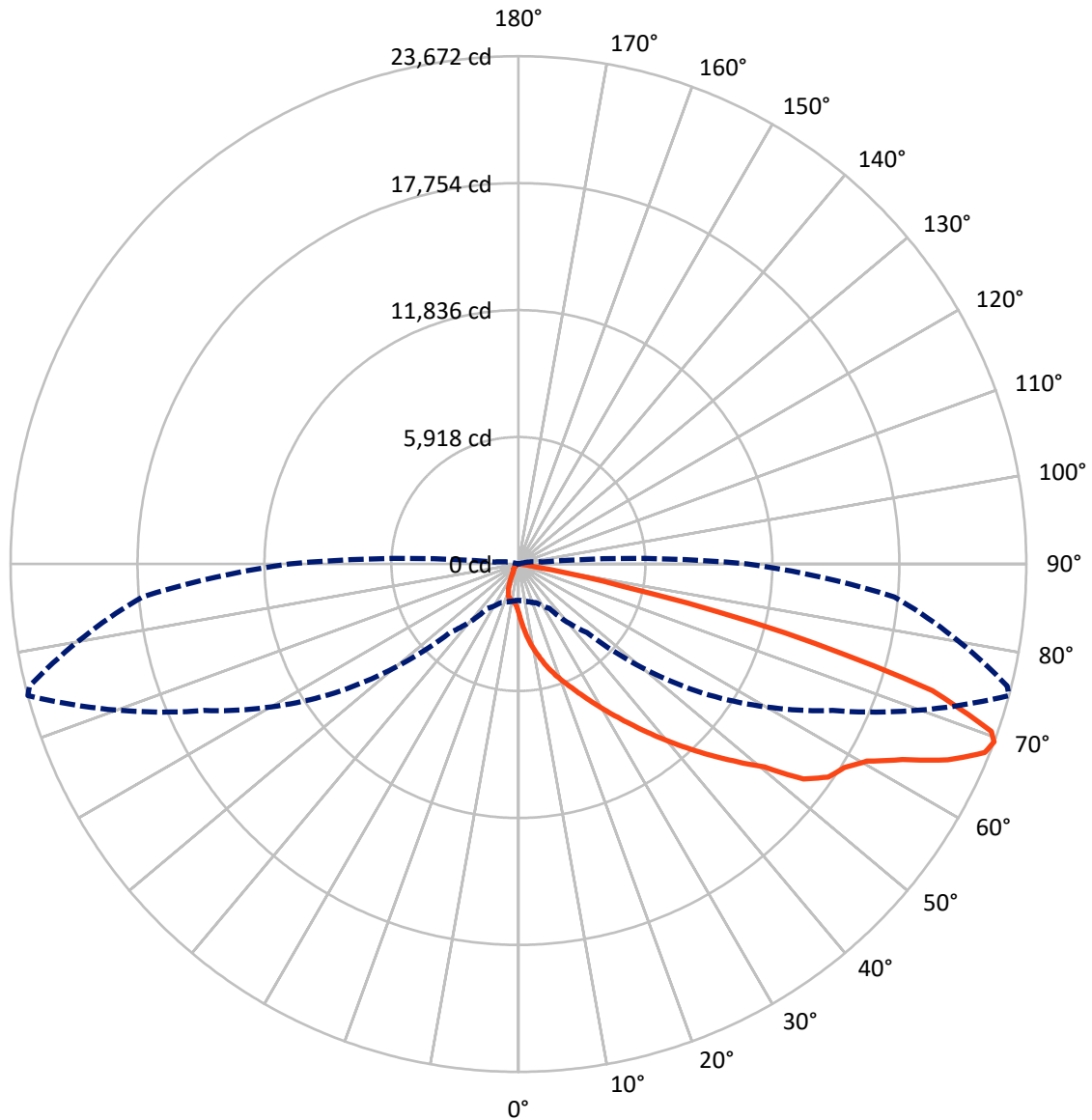
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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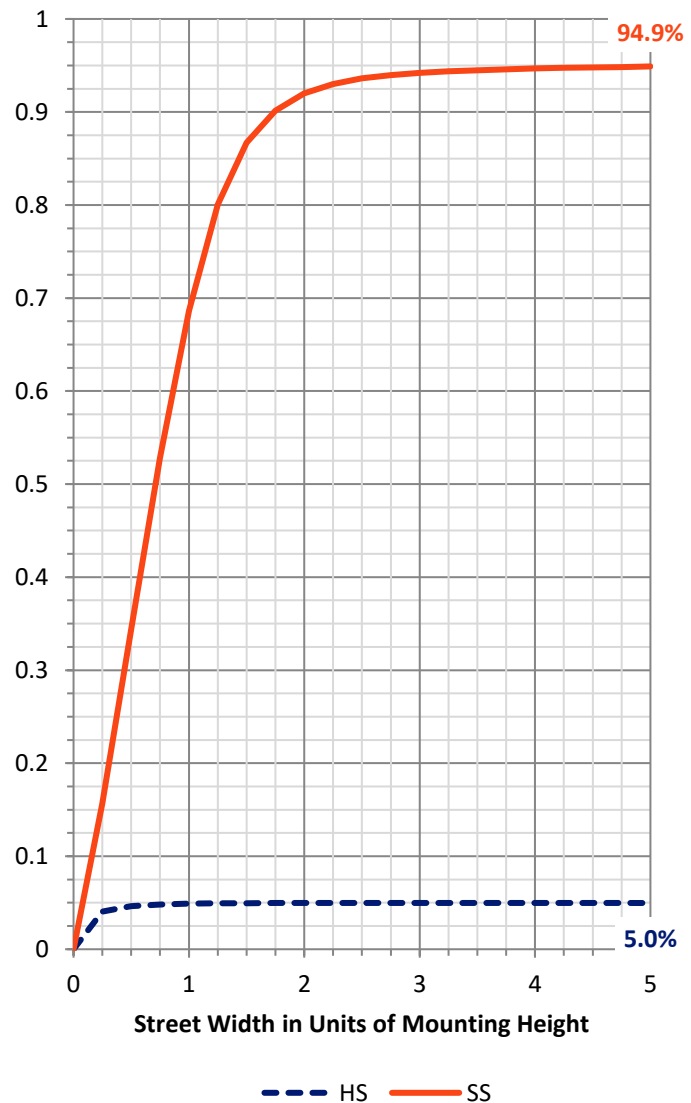
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1227.7	0.0	1227.7
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	23379.4	0.0	23379.4
	% Fixture	95.0	0.0	95.0
Total	Lumens	24607.1	0.0	24607.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	267.0	1.1
10°-20°	954.5	3.9
20°-30°	1822.2	7.4
30°-40°	3268.7	13.3
40°-50°	5007.9	20.4
50°-60°	5820.4	23.7
60°-70°	5154.1	20.9
70°-80°	2223.2	9.0
80°-90°	89.1	0.4
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°	24607.1	100.0
0°-180°	24607.1	100.0

Coefficient of Utilization



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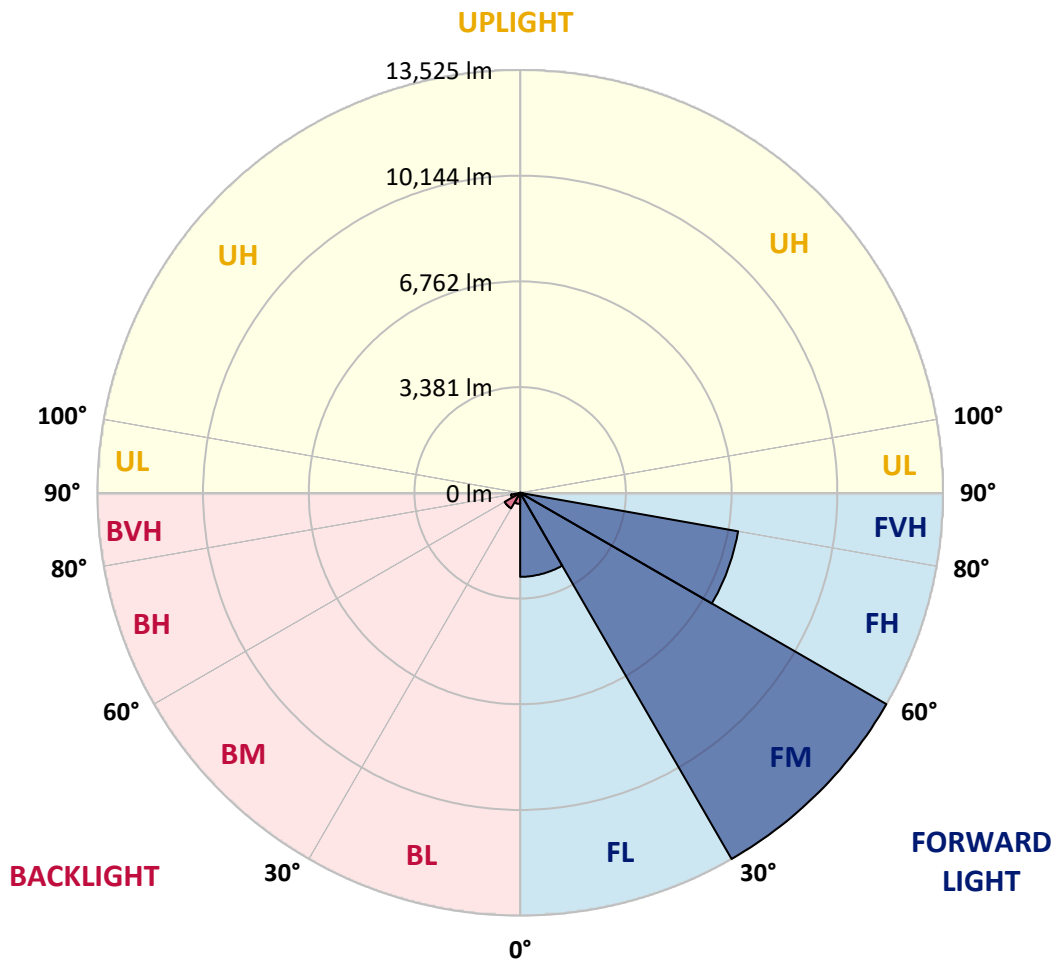
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2687.1	10.9			
FM	(30°-60°)	13524.7	55.0			
FH	(60°-80°)	7079.8	28.8			G3/7500
FVH	(80°-90°)	87.8	0.4			G1/100
BL	(0°-30°)	356.6	1.4	B1/500		
BM	(30°-60°)	572.4	2.3	B1/1000		
BH	(60°-80°)	297.5	1.2	B1/500		G1/500
BVH	(80°-90°)	1.3	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-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2289.7	2289.7	2289.7	2289.7	2289.7	2289.7	2289.7	2289.7	2289.7	2289.7	2289.7
2.5°	3771.8	3734.7	3697.5	3655.0	3559.4	3394.7	3187.5	2964.4	2688.1	2640.3	2417.1
5°	4579.3	4563.4	4526.3	4467.8	4361.6	4180.9	3947.2	3617.8	3155.6	3075.9	2603.1
7.5°	5147.8	5137.2	5105.3	5036.2	4940.6	4760.0	4515.6	4159.6	3623.1	3532.8	2836.8
10°	5657.8	5652.5	5625.9	5562.2	5466.5	5269.9	5009.7	4637.8	4069.4	3968.4	3107.8
12.5°	6120.0	6125.3	6114.7	6082.8	6013.7	5827.8	5530.3	5126.5	4499.7	4388.2	3431.9
15°	6390.9	6406.8	6449.4	6513.1	6534.3	6385.6	6077.5	5631.2	4940.6	4845.0	3803.7
17.5°	6300.6	6316.5	6449.4	6667.2	6874.3	6895.6	6619.3	6109.4	5376.2	5280.6	4170.3
20°	6082.8	6104.0	6242.1	6539.6	6943.4	7225.0	7113.4	6629.9	5790.6	5673.7	4520.9
22.5°	6327.2	6327.2	6369.7	6550.3	6916.9	7357.8	7506.5	7150.6	6215.7	6072.1	4871.5
25°	7166.6	7150.6	7060.3	6985.9	7102.8	7495.9	7804.0	7681.8	6715.0	6550.3	5243.4
27.5°	8229.0	8303.4	8133.4	7862.5	7596.8	7766.9	8069.6	8207.7	7267.5	7097.4	5625.9
30°	9419.0	9450.9	9249.0	8887.8	8420.3	8255.6	8383.1	8659.4	7867.8	7681.8	6024.4
32.5°	10492.2	10465.6	10295.6	9918.4	9339.3	8983.5	8786.8	9020.6	8521.2	8308.7	6433.4
35°	11443.1	11464.3	11257.2	10821.5	10253.1	9875.9	9408.4	9429.7	9254.3	9009.9	6906.2
37.5°	12298.4	12261.2	12064.7	11629.0	11113.7	10704.7	10210.6	9854.7	10056.5	9801.5	7437.5
40°	12994.3	12957.1	12750.0	12324.9	11841.5	11506.9	11119.1	10423.1	10901.2	10609.0	8005.9
42.5°	13546.8	13504.3	13329.0	12920.0	12452.5	12155.0	11969.0	11124.4	11804.3	11512.2	8643.4
45°	13817.8	13780.6	13674.3	13366.2	12957.1	12696.9	12787.2	11931.8	12771.2	12526.9	9344.7
47.5°	13499.1	13483.1	13605.2	13552.2	13318.4	13180.3	13493.7	12813.7	13785.9	13546.8	10152.2
50°	12532.2	12558.7	12914.7	13355.5	13467.1	13631.8	14072.7	13743.3	14874.9	14619.9	11081.8
52.5°	10146.9	10327.5	11400.6	12463.1	13286.5	13908.0	14752.8	15071.5	16649.3	16399.6	12532.2
55°	7575.6	7649.9	8818.8	10635.6	12558.7	13886.9	15257.4	15852.5	17525.9	17270.9	12914.7
57.5°	6008.4	6035.0	6614.0	8468.1	11060.6	13408.7	15523.1	16134.0	17908.4	17695.9	13483.1
60°	4717.4	4749.4	5169.1	6444.1	8951.5	12117.8	15140.6	16378.4	18657.4	18487.5	14476.5
62.5°	3671.0	3702.8	3957.8	4706.9	6715.0	10130.9	14370.3	16771.5	20081.1	20001.5	16102.2
65°	2842.2	2852.8	3028.1	3378.7	4744.0	7979.3	13429.9	17138.1	22004.3	21935.2	17419.6
67.5°	2098.5	2114.3	2236.6	2454.4	3203.5	5732.2	11889.3	16856.5	23454.6	23252.7	17897.8
69°	1694.7	1710.6	1816.9	1992.2	2528.7	4515.6	10481.6	16160.6	23672.4	23481.1	17595.0
70°	1450.3	1461.0	1567.2	1715.9	2156.9	3835.7	9365.9	15560.3	23385.6	23199.6	16904.4
72.5°	929.7	982.9	1089.0	1184.7	1429.1	2539.4	6321.8	12904.0	20176.8	19858.0	13238.7
75°	515.3	531.2	722.5	839.3	950.9	1652.2	3516.9	8048.4	12835.0	12611.9	7081.6
77.5°	425.0	435.6	510.0	637.5	637.5	924.3	1328.1	3171.6	4882.1	4404.0	1917.8
80°	297.5	308.1	387.8	419.7	456.8	520.6	430.4	695.9	754.3	669.4	286.8
82.5°	207.1	217.8	265.7	345.3	366.5	244.4	159.4	207.1	217.8	217.8	111.6
85°	37.2	53.1	196.6	286.8	217.8	74.4	90.3	74.4	69.0	74.4	26.6
87.5°	0.0	0.0	122.1	138.1	116.9	31.9	37.2	26.6	16.0	21.3	10.6
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°	2289.7	2289.7	2289.7	2289.7	2289.7	2289.7	2289.7	2289.7	2289.7	2289.7	2289.7
2.5°	2305.6	2194.0	2002.8	1864.6	1747.8	1657.5	1620.4	1561.8	1519.4	1540.7	1514.1
5°	2369.4	2172.8	1864.6	1668.1	1530.0	1413.1	1317.5	1243.1	1184.7	1174.0	1163.4
7.5°	2470.3	2188.7	1784.9	1540.7	1333.4	1152.8	1004.0	892.5	807.5	807.5	775.6
10°	2608.4	2231.3	1737.2	1413.1	1105.0	860.6	711.9	605.6	563.1	557.8	547.2
12.5°	2799.7	2310.9	1700.0	1248.4	860.6	626.9	536.5	499.4	483.4	478.1	472.8
15°	3060.0	2427.8	1657.5	1046.6	653.5	515.3	478.1	446.2	430.4	425.0	419.7
17.5°	3309.7	2534.1	1567.2	839.3	531.2	467.5	425.0	398.4	377.2	371.8	371.8
20°	3543.4	2624.4	1413.1	653.5	478.1	419.7	377.2	345.3	324.1	318.8	318.8
22.5°	3787.8	2698.7	1221.9	531.2	435.6	371.8	329.4	297.5	276.3	271.0	265.7
25°	4048.1	2751.8	1004.0	472.8	393.1	329.4	281.5	255.0	239.1	233.7	228.4
27.5°	4329.6	2773.1	796.9	430.4	345.3	286.8	244.4	217.8	207.1	201.8	201.8
30°	4584.7	2751.8	616.2	382.5	302.8	249.7	212.5	191.3	180.7	175.3	175.3
32.5°	4850.3	2698.7	494.1	340.0	265.7	212.5	180.7	164.7	159.4	154.1	154.1
35°	5131.8	2629.7	425.0	302.8	228.4	186.0	159.4	148.7	143.4	138.1	138.1
37.5°	5461.2	2544.7	387.8	271.0	201.8	164.7	138.1	132.8	127.5	127.5	127.5
40°	5833.1	2438.4	361.2	244.4	180.7	143.4	122.1	116.9	111.6	111.6	111.6
42.5°	6226.2	2316.3	334.7	217.8	159.4	122.1	106.3	106.3	101.0	101.0	95.6
45°	6667.2	2194.0	308.1	191.3	138.1	106.3	90.3	85.0	85.0	79.7	79.7
47.5°	7187.8	2082.5	281.5	170.0	122.1	90.3	79.7	74.4	69.0	63.7	63.7
50°	7920.9	2071.9	249.7	148.7	111.6	74.4	63.7	58.4	53.1	47.8	47.8
52.5°	8648.7	1976.2	212.5	122.1	90.3	63.7	47.8	42.5	37.2	37.2	31.9
55°	8813.4	1816.9	186.0	106.3	69.0	47.8	37.2	26.6	26.6	21.3	21.3
57.5°	9174.6	1742.5	159.4	85.0	53.1	37.2	21.3	16.0	16.0	16.0	16.0
60°	9886.5	1721.2	138.1	74.4	37.2	26.6	16.0	10.6	10.6	5.3	5.3
62.5°	10869.4	1700.0	116.9	63.7	26.6	16.0	10.6	5.3	0.0	0.0	0.0
65°	11411.2	1556.5	95.6	47.8	21.3	16.0	5.3	0.0	0.0	0.0	0.0
67.5°	11267.8	1285.6	85.0	31.9	16.0	10.6	5.3	0.0	0.0	0.0	0.0
69°	10667.4	1083.7	69.0	26.6	16.0	10.6	5.3	0.0	0.0	0.0	0.0
70°	9944.9	935.0	63.7	21.3	10.6	5.3	5.3	0.0	0.0	0.0	0.0
72.5°	7060.3	488.8	42.5	16.0	10.6	5.3	0.0	0.0	0.0	0.0	0.0
75°	3299.0	217.8	26.6	10.6	5.3	5.3	0.0	0.0	0.0	0.0	0.0
77.5°	727.8	101.0	16.0	10.6	5.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	138.1	37.2	10.6	5.3	5.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	47.8	16.0	5.3	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.3	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)