

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: P265690

Luminaire Tested: **ARCH-L-AF72-220-D-U-T2R-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265690
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-AF72-220-D-U-T2R-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 945mA 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: 18060.3 lumens
Efficiency: N/A
Efficacy: 81.4 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): 222
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

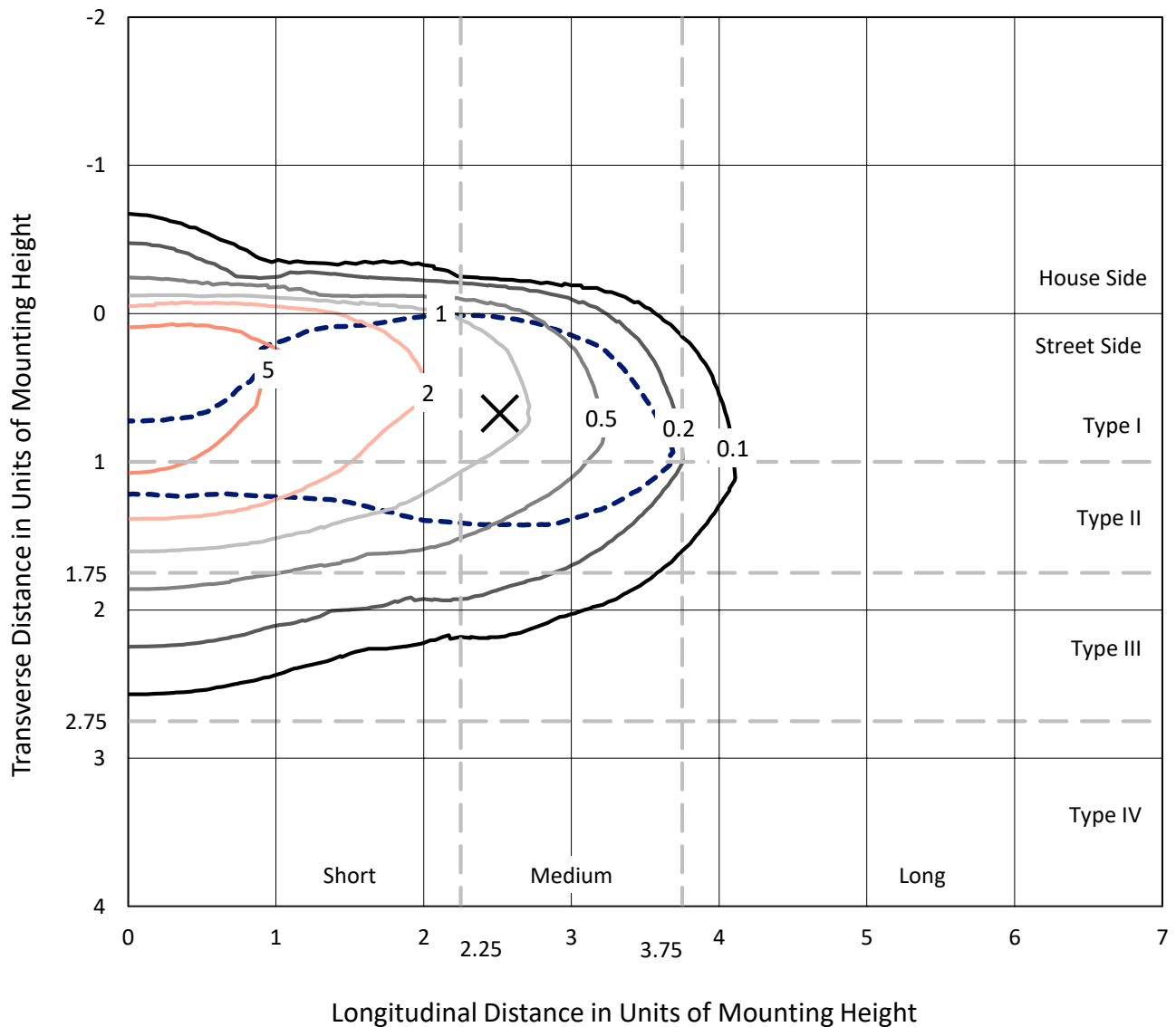


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

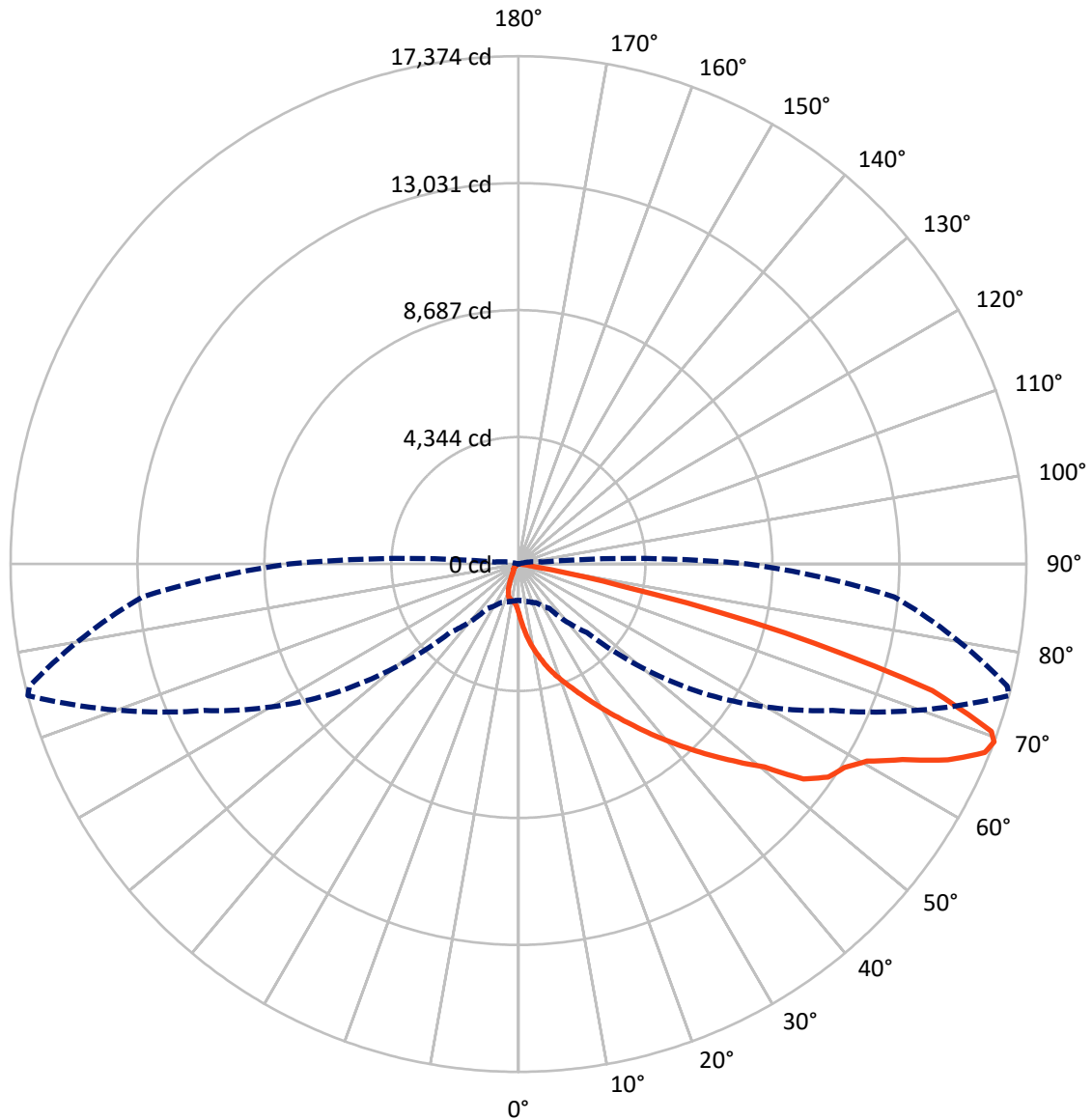


Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



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

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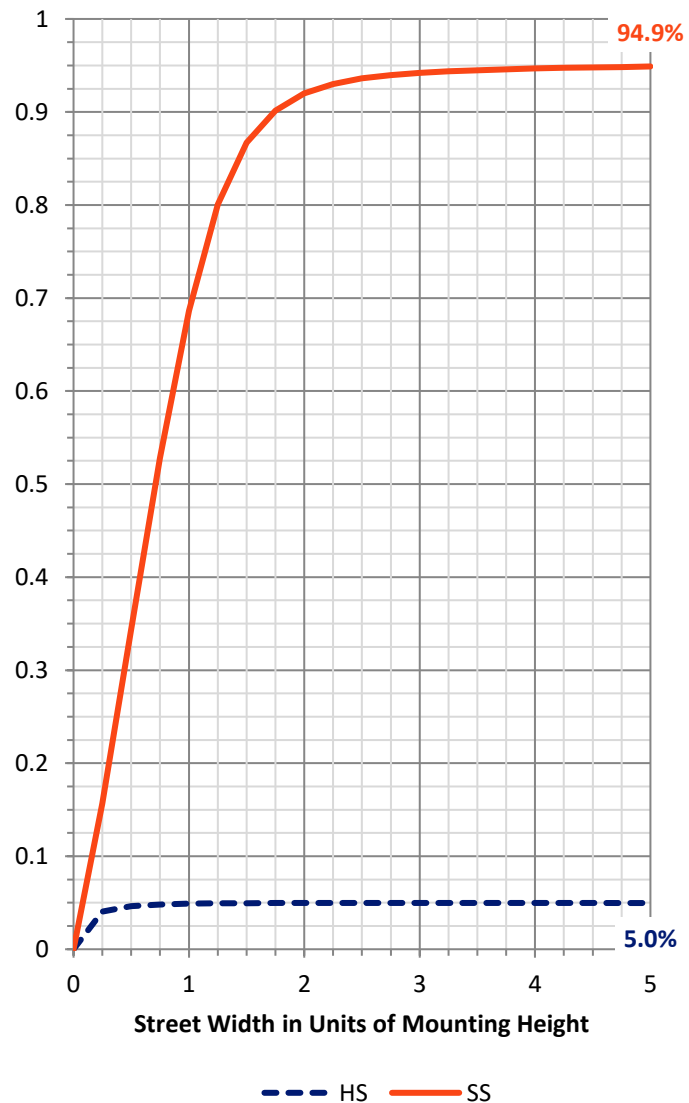
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	901.1	0.0	901.1
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	17159.2	0.0	17159.2
	% Fixture	95.0	0.0	95.0
Total	Lumens	18060.3	0.0	18060.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.0	1.1
10°-20°	700.6	3.9
20°-30°	1337.4	7.4
30°-40°	2399.1	13.3
40°-50°	3675.5	20.4
50°-60°	4271.9	23.7
60°-70°	3782.8	20.9
70°-80°	1631.7	9.0
80°-90°	65.4	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°	18060.3	100.0
0°-180°	18060.3	100.0

Coefficient of Utilization



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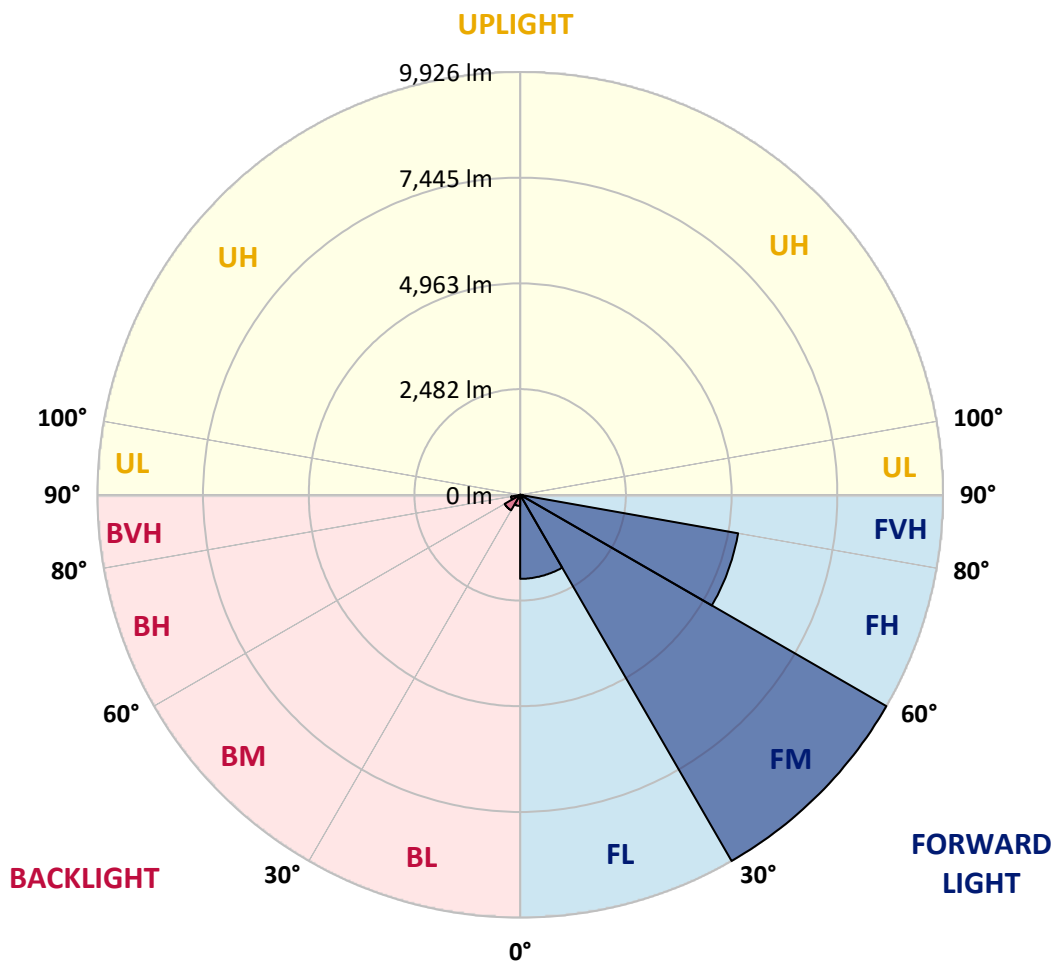
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1972.2	10.9			
FM	(30°-60°)	9926.4	55.0			
FH	(60°-80°)	5196.2	28.8			G3/7500
FVH	(80°-90°)	64.4	0.4			G1/100
BL	(0°-30°)	261.7	1.4	B1/500		
BM	(30°-60°)	420.1	2.3	B1/1000		
BH	(60°-80°)	218.3	1.2	B1/500		G1/500
BVH	(80°-90°)	1.0	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°	1680.5	1680.5	1680.5	1680.5	1680.5	1680.5	1680.5	1680.5	1680.5	1680.5	1680.5
2.5°	2768.3	2741.1	2713.8	2682.6	2612.5	2491.4	2339.5	2175.7	1972.9	1937.9	1774.1
5°	3361.0	3349.3	3322.0	3279.2	3201.1	3068.6	2897.0	2655.3	2316.0	2257.6	1910.5
7.5°	3778.2	3770.4	3747.0	3696.3	3626.2	3493.6	3314.1	3053.0	2659.2	2592.9	2082.1
10°	4152.5	4148.6	4129.1	4082.3	4012.1	3867.9	3676.9	3403.9	2986.7	2912.7	2280.9
12.5°	4491.7	4495.6	4487.8	4464.4	4413.7	4277.3	4058.9	3762.6	3302.4	3220.7	2518.8
15°	4690.6	4702.3	4733.4	4780.3	4795.8	4686.6	4460.5	4133.0	3626.2	3555.9	2791.8
17.5°	4624.3	4636.1	4733.4	4893.3	5045.4	5061.1	4858.3	4483.9	3945.9	3875.6	3060.7
20°	4464.4	4480.0	4581.4	4799.7	5096.1	5302.8	5220.9	4865.9	4250.1	4164.3	3318.1
22.5°	4643.8	4643.8	4675.0	4807.5	5076.6	5400.3	5509.3	5248.2	4562.0	4456.6	3575.4
25°	5259.8	5248.2	5181.9	5127.3	5213.0	5501.6	5727.8	5638.0	4928.5	4807.5	3848.3
27.5°	6039.7	6094.2	5969.4	5770.6	5575.7	5700.5	5922.6	6024.0	5334.0	5209.1	4129.1
30°	6913.0	6936.4	6788.3	6523.1	6180.0	6059.2	6152.8	6355.5	5774.6	5638.0	4421.5
32.5°	7700.7	7681.1	7556.5	7279.5	6854.5	6593.3	6449.0	6620.6	6254.1	6098.1	4721.9
35°	8398.7	8414.2	8262.2	7942.5	7525.2	7248.3	6905.2	6920.8	6792.2	6612.9	5068.7
37.5°	9026.3	8999.0	8854.9	8535.1	8156.9	7856.7	7494.0	7232.8	7381.0	7193.7	5458.7
40°	9537.1	9509.8	9357.7	9045.8	8691.0	8445.3	8160.7	7650.0	8000.8	7786.5	5876.0
42.5°	9942.6	9911.4	9782.7	9482.6	9139.4	8921.1	8784.5	8164.6	8663.8	8449.3	6343.8
45°	10141.4	10114.1	10036.3	9810.1	9509.8	9318.7	9385.0	8757.2	9373.4	9194.1	6858.5
47.5°	9907.5	9895.9	9985.5	9946.6	9774.9	9673.6	9903.6	9404.5	10118.1	9942.6	7451.1
50°	9197.8	9217.4	9478.6	9802.2	9884.1	10005.1	10328.6	10086.9	10917.5	10730.3	8133.4
52.5°	7447.2	7579.8	8367.4	9147.3	9751.6	10207.8	10827.7	11061.6	12219.6	12036.4	9197.8
55°	5560.1	5614.6	6472.5	7805.9	9217.4	10192.2	11198.1	11634.8	12863.0	12675.9	9478.6
57.5°	4409.9	4429.4	4854.4	6215.2	8117.9	9841.2	11393.1	11841.5	13143.8	12987.9	9895.9
60°	3462.3	3485.8	3793.8	4729.5	6569.9	8893.8	11112.4	12020.8	13693.6	13568.8	10625.0
62.5°	2694.2	2717.6	2904.8	3454.6	4928.5	7435.5	10547.0	12309.4	14738.5	14680.0	11818.1
65°	2086.0	2093.8	2222.4	2479.9	3481.9	5856.4	9856.8	12578.3	16150.0	16099.2	12785.0
67.5°	1540.1	1551.8	1641.6	1801.5	2351.1	4207.1	8726.1	12371.7	17214.4	17066.2	13135.9
69°	1243.9	1255.6	1333.4	1462.1	1856.0	3314.1	7692.8	11861.0	17374.3	17234.0	12913.8
70°	1064.4	1072.2	1150.2	1259.5	1583.1	2815.1	6874.1	11420.4	17163.6	17027.3	12406.9
72.5°	682.4	721.2	799.3	869.5	1048.9	1863.8	4639.8	9470.8	14808.6	14574.7	9716.4
75°	378.1	390.0	530.3	616.1	698.0	1212.6	2581.2	5907.1	9420.2	9256.3	5197.5
77.5°	311.9	319.7	374.4	467.8	467.8	678.4	974.8	2327.8	3583.2	3232.3	1407.6
80°	218.4	226.2	284.7	307.9	335.2	382.0	315.8	510.7	553.6	491.4	210.6
82.5°	152.1	159.9	194.9	253.4	269.0	179.3	117.0	152.1	159.9	159.9	81.8
85°	27.3	38.9	144.3	210.6	159.9	54.5	66.3	54.5	50.7	54.5	19.6
87.5°	0.0	0.0	89.7	101.4	85.8	23.4	27.3	19.6	11.7	15.6	7.7
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°	1680.5	1680.5	1680.5	1680.5	1680.5	1680.5	1680.5	1680.5	1680.5	1680.5	1680.5
2.5°	1692.1	1610.3	1469.9	1368.6	1282.8	1216.6	1189.3	1146.3	1115.2	1130.7	1111.3
5°	1738.9	1594.8	1368.6	1224.3	1122.9	1037.2	966.9	912.4	869.5	861.7	853.8
7.5°	1813.0	1606.3	1310.1	1130.7	978.7	846.2	736.9	655.0	592.6	592.6	569.3
10°	1914.5	1637.6	1275.1	1037.2	811.0	631.7	522.5	444.5	413.3	409.4	401.6
12.5°	2054.9	1696.1	1247.7	916.4	631.7	460.1	393.7	366.5	354.8	350.9	347.0
15°	2245.9	1781.9	1216.6	768.1	479.5	378.1	350.9	327.5	315.8	311.9	307.9
17.5°	2429.1	1859.9	1150.2	616.1	390.0	343.2	311.9	292.4	276.9	272.9	272.9
20°	2600.7	1926.1	1037.2	479.5	350.9	307.9	276.9	253.4	237.8	234.0	234.0
22.5°	2780.1	1980.8	896.8	390.0	319.7	272.9	241.7	218.4	202.7	198.9	194.9
25°	2971.1	2019.7	736.9	347.0	288.5	241.7	206.6	187.1	175.4	171.5	167.7
27.5°	3177.8	2035.3	584.8	315.8	253.4	210.6	179.3	159.9	152.1	148.2	148.2
30°	3365.0	2019.7	452.2	280.7	222.2	183.3	155.9	140.3	132.6	128.6	128.6
32.5°	3559.9	1980.8	362.6	249.5	194.9	155.9	132.6	120.9	117.0	113.0	113.0
35°	3766.6	1930.1	311.9	222.2	167.7	136.5	117.0	109.1	105.3	101.4	101.4
37.5°	4008.2	1867.7	284.7	198.9	148.2	120.9	101.4	97.5	93.6	93.6	93.6
40°	4281.2	1789.7	265.1	179.3	132.6	105.3	89.7	85.8	81.8	81.8	81.8
42.5°	4569.7	1700.0	245.6	159.9	117.0	89.7	78.1	78.1	74.1	74.1	70.2
45°	4893.3	1610.3	226.2	140.3	101.4	78.1	66.3	62.4	62.4	58.5	58.5
47.5°	5275.4	1528.5	206.6	124.8	89.7	66.3	58.5	54.5	50.7	46.8	46.8
50°	5813.6	1520.7	183.3	109.1	81.8	54.5	46.8	42.8	38.9	35.2	35.2
52.5°	6347.8	1450.5	155.9	89.7	66.3	46.8	35.2	31.3	27.3	27.3	23.4
55°	6468.5	1333.4	136.5	78.1	50.7	35.2	27.3	19.6	19.6	15.6	15.6
57.5°	6733.6	1278.8	117.0	62.4	38.9	27.3	15.6	11.7	11.7	11.7	11.7
60°	7256.1	1263.2	101.4	54.5	27.3	19.6	11.7	7.7	7.7	4.0	4.0
62.5°	7977.5	1247.7	85.8	46.8	19.6	11.7	7.7	4.0	0.0	0.0	0.0
65°	8375.2	1142.5	70.2	35.2	15.6	11.7	4.0	0.0	0.0	0.0	0.0
67.5°	8269.9	943.6	62.4	23.4	11.7	7.7	4.0	0.0	0.0	0.0	0.0
69°	7829.4	795.4	50.7	19.6	11.7	7.7	4.0	0.0	0.0	0.0	0.0
70°	7299.1	686.2	46.8	15.6	7.7	4.0	4.0	0.0	0.0	0.0	0.0
72.5°	5181.9	358.8	31.3	11.7	7.7	4.0	0.0	0.0	0.0	0.0	0.0
75°	2421.3	159.9	19.6	7.7	4.0	4.0	0.0	0.0	0.0	0.0	0.0
77.5°	534.2	74.1	11.7	7.7	4.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	101.4	27.3	7.7	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	35.2	11.7	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.7	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.0	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)