

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: P265737

Luminaire Tested: **ARCH-L-AF72-270-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265737
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-AF72-270-D-U-T2U-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1155mA 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: 17830.6 lumens
Efficiency: N/A
Efficacy: 65.3 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 - G2

Input Watts (W): 273
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

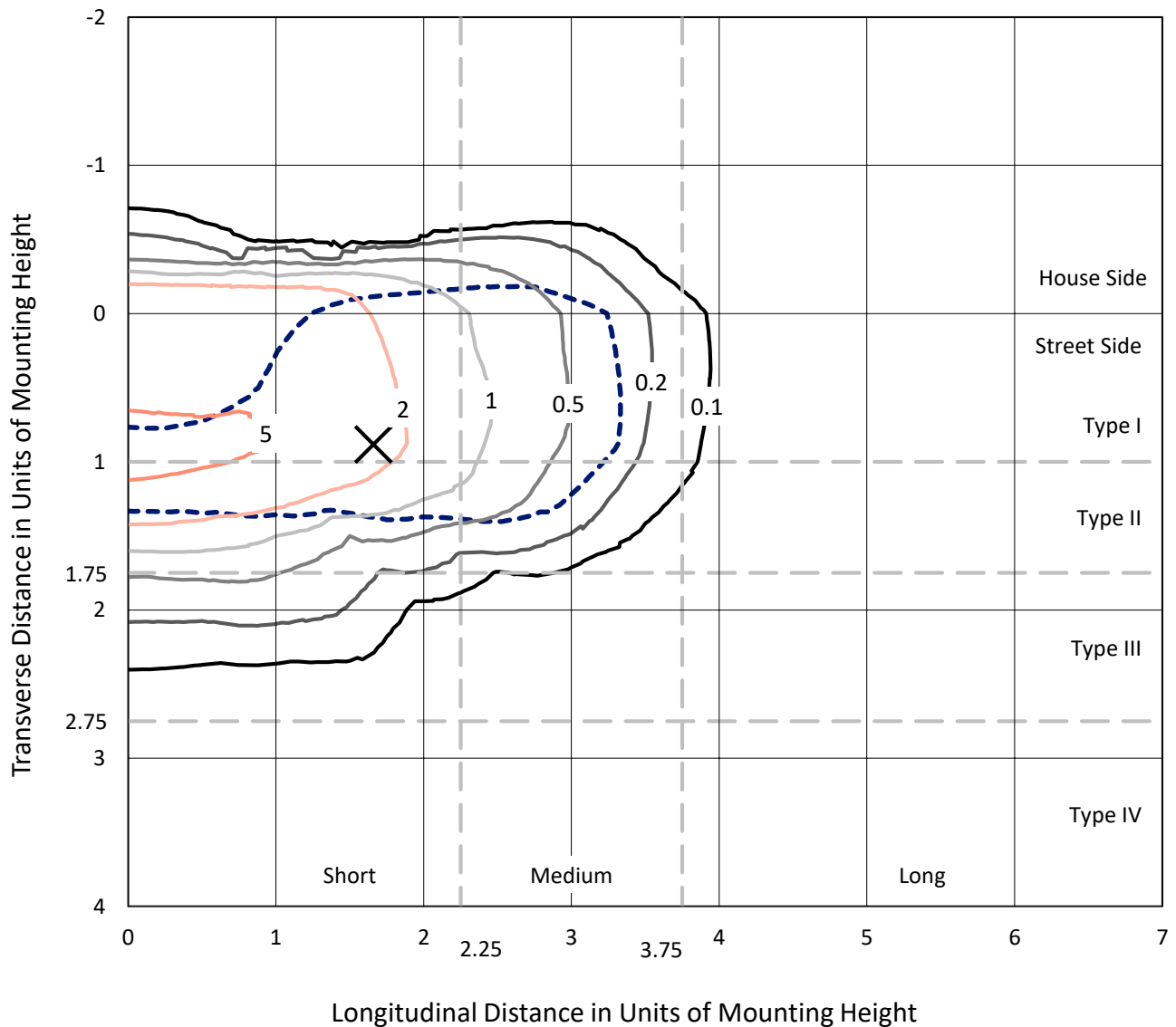


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

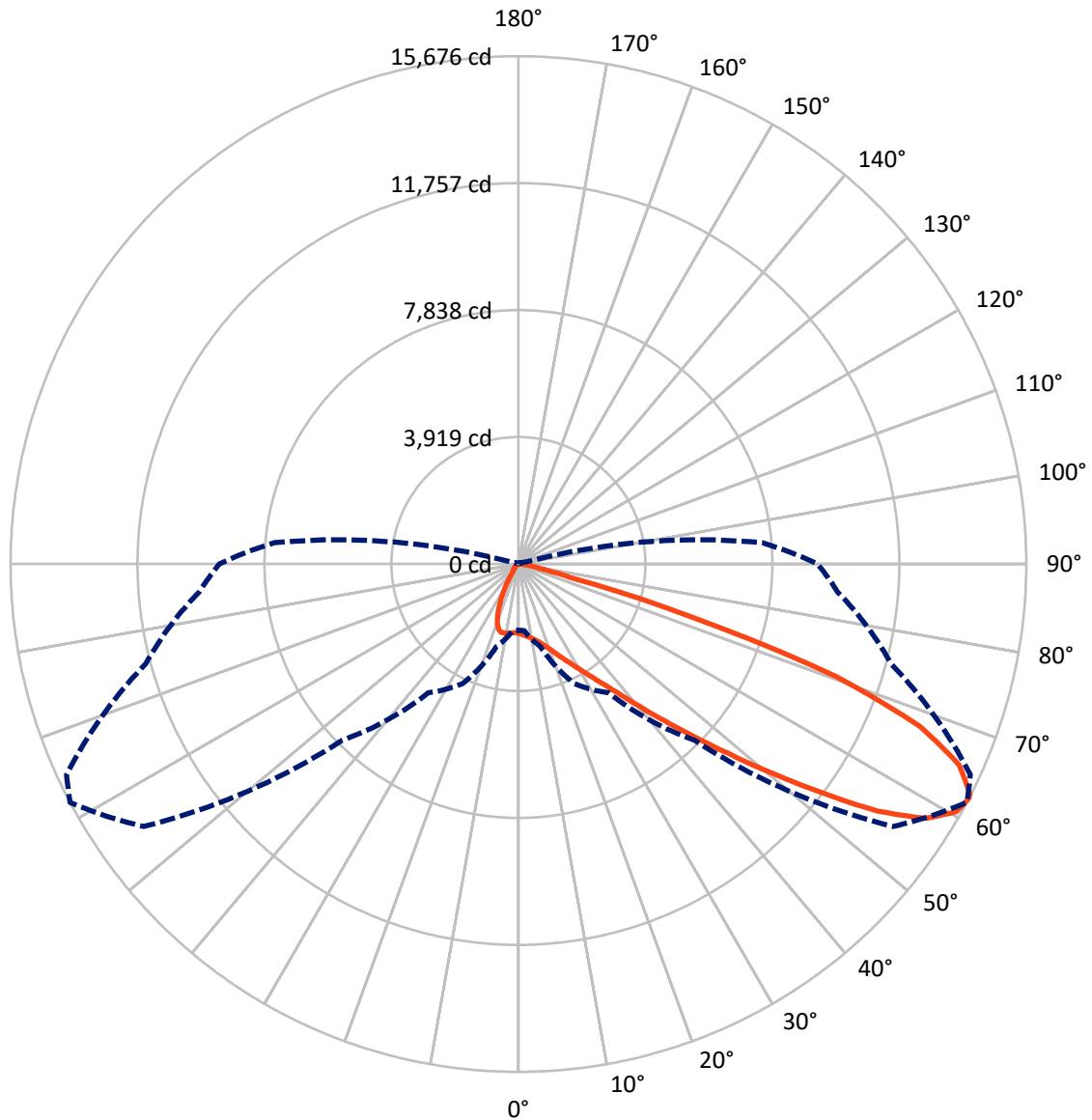


Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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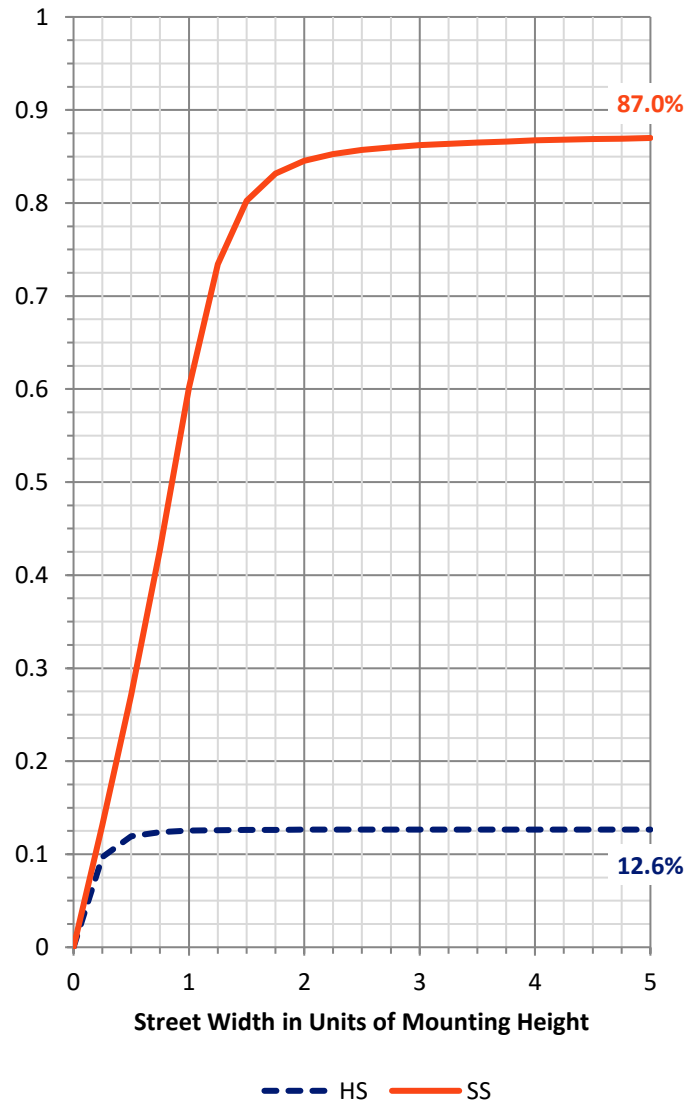
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2279.9	0.0	2279.9
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	15550.7	0.0	15550.7
	% Fixture	87.2	0.0	87.2
Total	Lumens	17830.6	0.0	17830.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.7	1.2
10°-20°	577.2	3.2
20°-30°	969.4	5.4
30°-40°	1858.3	10.4
40°-50°	3795.7	21.3
50°-60°	5023.0	28.2
60°-70°	3902.0	21.9
70°-80°	1408.4	7.9
80°-90°	89.8	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°	17830.6	100.0
0°-180°	17830.6	100.0



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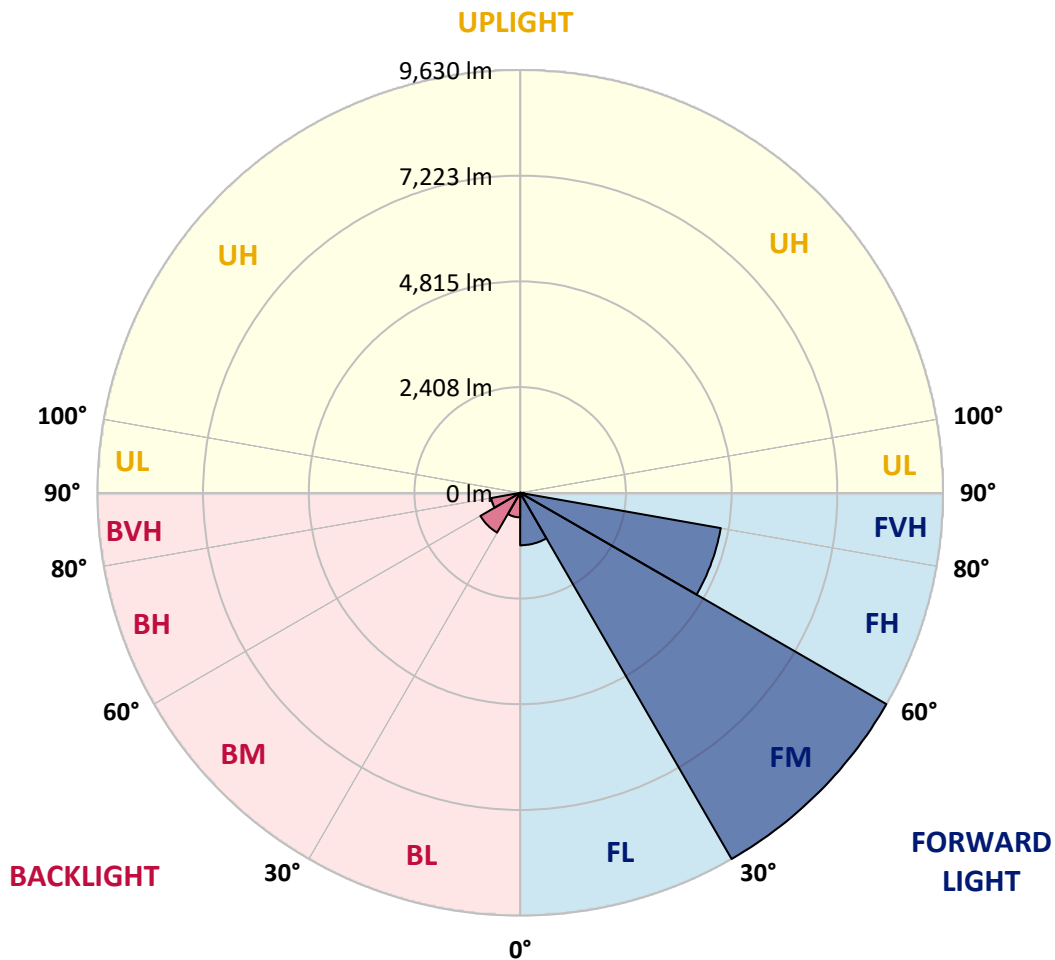
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1195.4	6.7			
FM	(30°-60°)	9630.3	54.0			
FH	(60°-80°)	4639.1	26.0			G2/5000
FVH	(80°-90°)	85.8	0.5			G1/100
BL	(0°-30°)	558.0	3.1	B2/1000		
BM	(30°-60°)	1046.6	5.9	B2/2500		
BH	(60°-80°)	671.3	3.8	B2/1000		G2/1000
BVH	(80°-90°)	3.9	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-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	2147.9	2147.9	2147.9	2147.9	2147.9	2147.9	2147.9	2147.9	2147.9	2147.9	2147.9
2.5°	2204.9	2200.5	2196.1	2191.8	2191.8	2187.4	2183.1	2174.2	2165.5	2156.7	2152.2
5°	2244.3	2240.0	2235.6	2240.0	2235.6	2235.6	2231.2	2222.4	2213.7	2200.5	2187.4
7.5°	2275.0	2270.6	2266.2	2270.6	2275.0	2279.4	2283.9	2275.0	2270.6	2253.0	2240.0
10°	2314.6	2310.1	2305.7	2314.6	2314.6	2336.4	2340.9	2336.4	2332.0	2318.9	2297.0
12.5°	2371.4	2375.8	2375.8	2384.6	2393.4	2419.8	2428.5	2415.4	2415.4	2397.8	2371.4
15°	2476.6	2476.6	2476.6	2485.5	2489.8	2524.9	2533.7	2520.6	2529.3	2498.6	2472.3
17.5°	2577.4	2581.9	2590.6	2608.1	2608.1	2639.0	2656.4	2656.4	2674.0	2634.5	2599.4
20°	2678.3	2682.7	2695.9	2735.2	2735.2	2774.8	2805.4	2818.6	2836.0	2796.8	2735.2
22.5°	2787.9	2787.9	2809.9	2871.3	2858.0	2937.0	2994.0	3015.9	3033.3	2980.8	2884.4
25°	2954.4	2937.0	2954.4	3011.5	3002.8	3112.3	3217.5	3239.4	3261.3	3199.9	3055.3
27.5°	3270.1	3243.8	3182.4	3186.7	3186.7	3313.9	3463.0	3493.7	3506.9	3454.3	3274.5
30°	3901.2	3901.2	3673.3	3520.0	3419.2	3533.2	3743.5	3796.1	3813.7	3734.8	3498.1
32.5°	5001.7	5001.7	4580.7	4190.7	3809.4	3809.4	4050.4	4146.8	4164.4	4072.2	3796.1
35°	6404.3	6395.6	5764.3	5229.6	4484.3	4203.8	4409.8	4572.1	4624.7	4501.9	4181.9
37.5°	7894.8	7837.7	7158.4	6544.6	5523.1	4835.0	4896.4	5111.1	5159.4	5058.5	4681.5
40°	9104.6	9038.8	8490.9	7977.9	6864.6	5843.2	5597.8	5795.1	5852.0	5711.8	5277.7
42.5°	10200.4	10038.3	9661.4	9293.1	8407.5	7587.9	6531.4	6610.4	6671.7	6522.7	5948.4
45°	10993.8	10744.0	10551.1	10437.1	9968.1	9503.4	7741.4	7583.5	7605.4	7421.3	6680.4
47.5°	11015.7	10840.4	10858.0	11156.1	11348.9	11331.4	9315.0	8754.0	8670.6	8363.8	7460.8
50°	9963.7	10064.6	10384.5	11234.9	12278.3	12909.5	11186.8	10139.1	9889.3	9337.0	8236.6
52.5°	8210.2	8368.2	8968.7	10402.2	12414.1	13948.3	13128.6	11721.5	11274.4	10301.3	8832.9
55°	6430.6	6439.4	7070.6	8530.3	11506.7	14136.8	14680.5	13461.8	12778.0	11033.3	9227.3
57.5°	4423.0	4664.1	5466.2	6448.2	9459.6	13198.7	15263.5	14812.0	13930.8	11484.8	9503.4
60°	2897.6	2910.7	3844.3	4979.7	6439.4	10739.6	14908.4	15526.5	14864.6	11752.3	9692.0
62°	2042.7	2064.7	2643.3	4068.0	4852.6	7697.4	14123.7	15675.5	15390.5	11910.0	9889.3
62.5°	1893.6	1911.2	2397.8	3840.0	4558.9	6904.1	13843.2	15640.4	15469.4	11962.5	9959.4
65°	1389.6	1389.6	1569.2	2639.0	3340.3	3730.4	11730.2	14943.5	15364.3	12383.5	10222.4
67.5°	1074.0	1082.7	1144.1	1626.3	2520.6	2261.9	7487.1	13374.1	14268.4	13005.9	10371.4
70°	925.0	920.6	964.4	1078.3	1819.2	1503.6	3296.4	10437.1	11949.4	12848.1	10235.5
72.5°	683.8	688.2	789.0	946.9	1266.8	977.5	1490.4	5540.7	7750.0	10055.7	8771.4
75°	438.4	442.8	556.7	745.2	911.8	640.0	859.1	1652.6	3173.6	5575.8	5365.4
77.5°	293.7	302.5	363.9	521.6	797.9	398.8	539.2	692.7	955.5	2091.0	1924.3
80°	197.3	197.3	232.3	350.7	504.0	333.1	289.3	460.3	495.3	648.8	324.4
82.5°	131.5	131.5	153.4	232.3	328.8	298.1	175.3	249.9	289.3	324.4	113.9
85°	79.0	79.0	105.2	144.6	214.8	166.5	113.9	140.2	149.1	206.0	61.4
87.5°	48.1	43.8	70.2	100.8	113.9	100.8	74.5	74.5	79.0	113.9	30.7
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°	2147.9	2147.9	2147.9	2147.9	2147.9	2147.9	2147.9	2147.9	2147.9	2147.9	2147.9
2.5°	2143.5	2139.1	2134.8	2126.0	2112.9	2104.1	2095.3	2086.6	2077.8	2077.8	2091.0
5°	2183.1	2169.9	2152.2	2134.8	2108.5	2091.0	2077.8	2060.3	2051.5	2051.5	2056.0
7.5°	2231.2	2218.1	2187.4	2156.7	2117.2	2086.6	2056.0	2016.4	1985.8	1972.6	1985.8
10°	2283.9	2266.2	2222.4	2174.2	2130.4	2051.5	1950.7	1828.0	1722.7	1674.5	1696.4
12.5°	2349.5	2327.7	2275.0	2209.3	2108.5	1915.5	1665.7	1380.9	1201.0	1117.9	1135.4
15°	2446.1	2415.4	2340.9	2240.0	2016.4	1600.1	1192.3	863.5	696.9	626.8	635.6
17.5°	2560.0	2520.6	2419.8	2231.2	1779.7	1152.9	710.1	504.0	434.1	416.5	416.5
20°	2682.7	2630.1	2498.6	2165.5	1420.3	723.2	442.8	385.7	359.4	346.2	346.2
22.5°	2809.9	2739.7	2564.3	2012.1	1012.6	451.5	363.9	324.4	293.7	280.5	280.5
25°	2963.2	2871.3	2630.1	1744.7	644.4	363.9	311.3	271.7	241.0	223.6	227.9
27.5°	3143.0	3024.7	2687.1	1411.4	416.5	315.7	258.6	219.1	192.9	184.2	184.2
30°	3331.5	3191.1	2700.2	1056.4	337.6	271.7	214.8	179.8	162.2	153.4	153.4
32.5°	3590.0	3406.1	2660.8	701.3	284.9	227.9	179.8	149.1	136.0	131.5	131.5
35°	3932.1	3686.6	2568.8	434.1	241.0	188.5	149.1	131.5	118.3	113.9	113.9
37.5°	4366.0	4076.7	2406.6	298.1	206.0	153.4	127.1	113.9	105.2	100.8	100.8
40°	4944.6	4550.1	2196.1	258.6	175.3	131.5	109.7	100.8	92.0	92.0	92.0
42.5°	5558.4	5124.3	1924.3	227.9	149.1	113.9	96.5	87.7	83.4	79.0	79.0
45°	6228.9	5711.8	1586.9	201.6	127.1	100.8	87.7	74.5	70.2	70.2	70.2
47.5°	6895.3	6316.6	1218.6	175.3	109.7	87.7	74.5	65.8	61.4	57.0	57.0
50°	7579.1	6864.6	894.3	153.4	96.5	79.0	65.8	57.0	48.1	43.8	43.8
52.5°	8074.4	7193.4	653.2	131.5	83.4	65.8	52.6	43.8	35.0	30.7	30.7
55°	8438.3	7394.9	477.8	109.7	74.5	57.0	43.8	35.0	26.3	26.3	21.9
57.5°	8723.3	7491.4	359.4	96.5	65.8	48.1	35.0	26.3	21.9	17.5	17.5
60°	8942.4	7495.8	267.3	79.0	57.0	39.4	26.3	17.5	13.1	13.1	13.1
62°	9231.7	7552.8	219.1	65.8	52.6	35.0	21.9	13.1	8.8	4.4	4.4
62.5°	9315.0	7574.7	210.5	65.8	48.1	30.7	17.5	13.1	8.8	4.4	4.4
65°	9700.7	7614.2	162.2	52.6	39.4	26.3	13.1	8.8	0.0	0.0	0.0
67.5°	10051.5	7552.8	118.3	39.4	30.7	17.5	13.1	4.4	0.0	0.0	0.0
70°	10016.3	7132.1	83.4	26.3	21.9	13.1	8.8	0.0	0.0	0.0	0.0
72.5°	8254.2	5339.2	57.0	21.9	13.1	8.8	4.4	0.0	0.0	0.0	0.0
75°	4984.1	2336.4	39.4	13.1	13.1	8.8	4.4	0.0	0.0	0.0	0.0
77.5°	1635.1	846.1	26.3	8.8	8.8	4.4	4.4	0.0	0.0	0.0	0.0
80°	267.3	140.2	13.1	8.8	8.8	4.4	4.4	0.0	0.0	0.0	0.0
82.5°	83.4	35.0	8.8	8.8	4.4	4.4	0.0	0.0	0.0	0.0	0.0
85°	30.7	13.1	8.8	8.8	4.4	4.4	0.0	0.0	0.0	0.0	0.0
87.5°	13.1	8.8	8.8	8.8	4.4	4.4	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)