

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: P236942

Luminaire Tested: **ARCH-L-AF72-90-D-U-T2R-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P236942
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-90-D-U-T2R-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 400mA 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: 10092.2 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

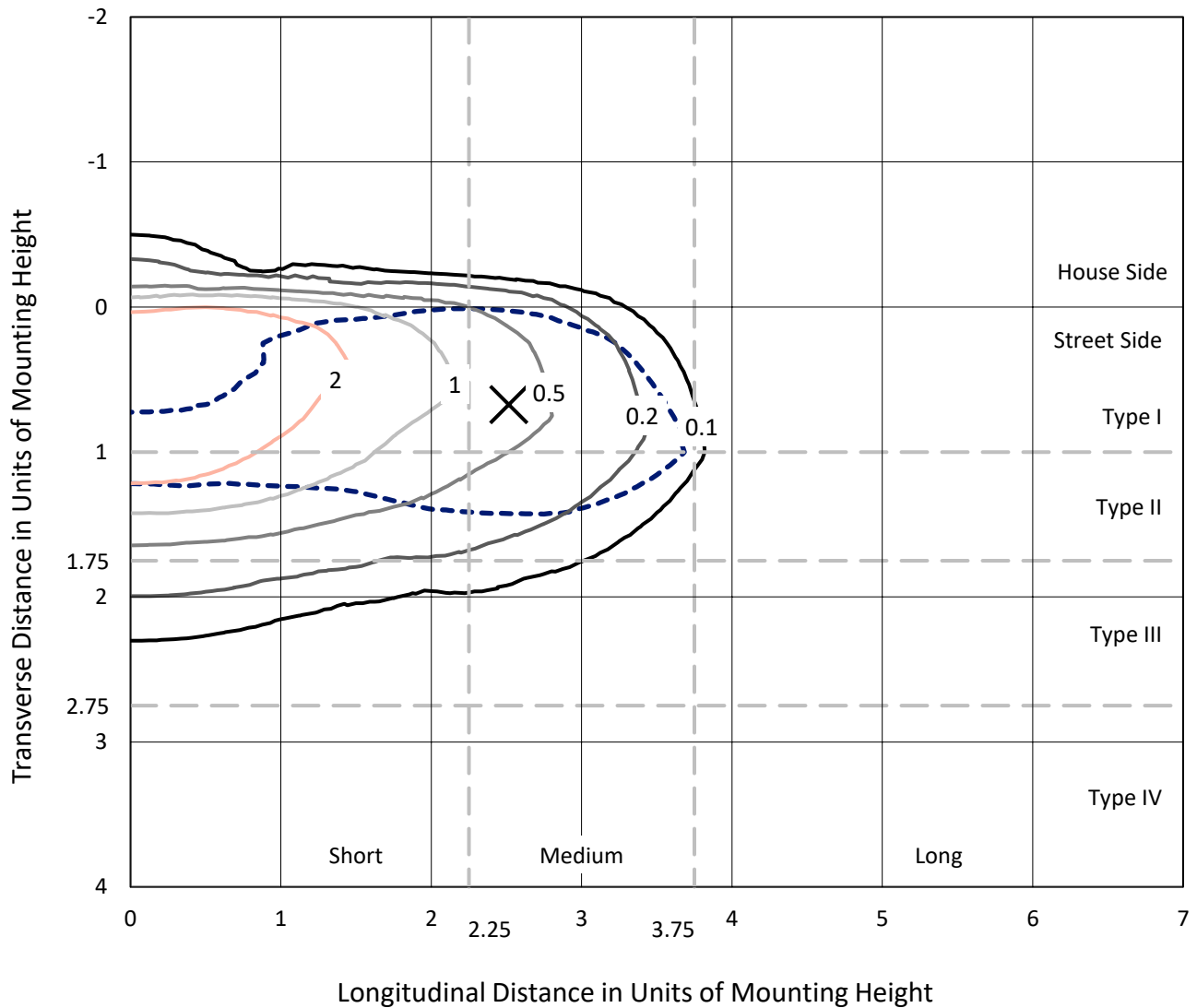
Input Watts (W): 93
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

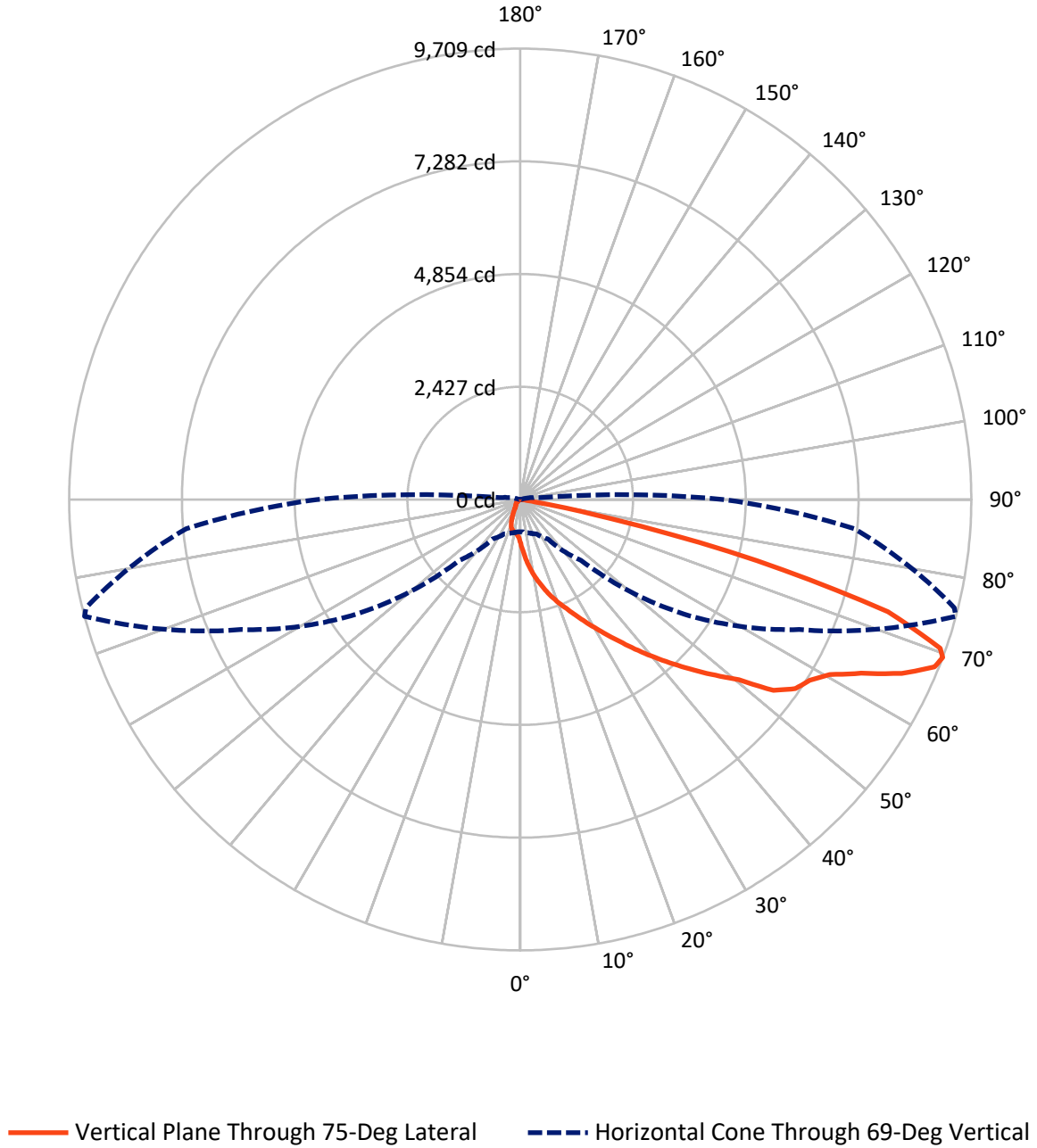
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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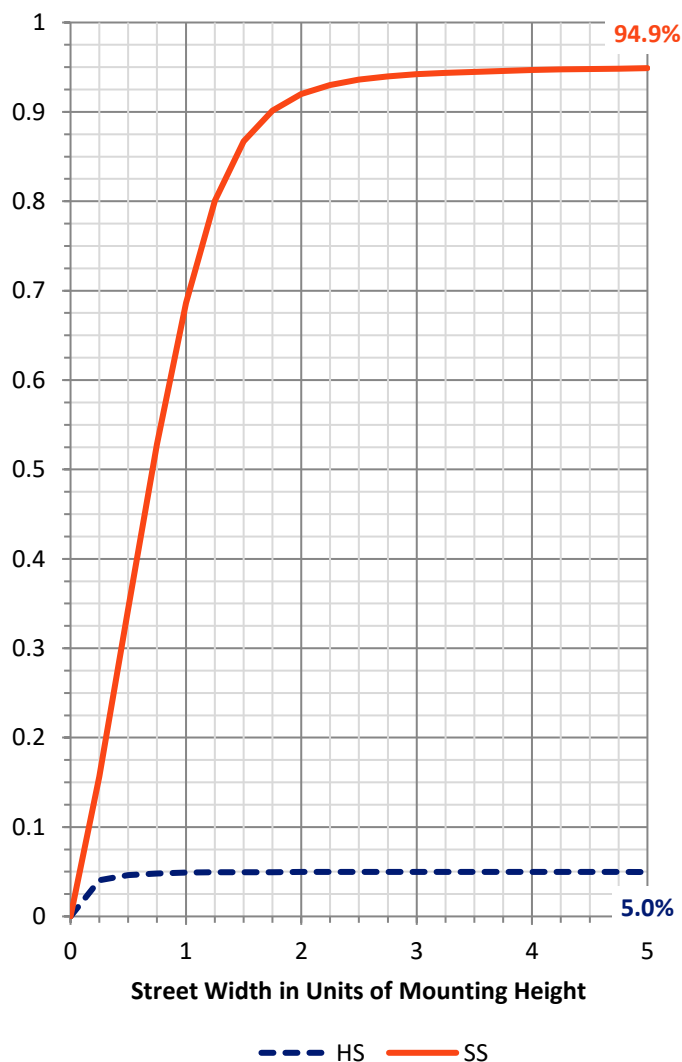
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	503.5	0.0	503.5
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	9588.7	0.0	9588.7
	% Fixture	95.0	0.0	95.0
Total	Lumens	10092.2	0.0	10092.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.5	1.1
10°-20°	391.5	3.9
20°-30°	747.4	7.4
30°-40°	1340.6	13.3
40°-50°	2053.9	20.4
50°-60°	2387.2	23.7
60°-70°	2113.9	20.9
70°-80°	911.8	9.0
80°-90°	36.5	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°	10092.2	100.0
0°-180°	10092.2	100.0

Coefficient of Utilization



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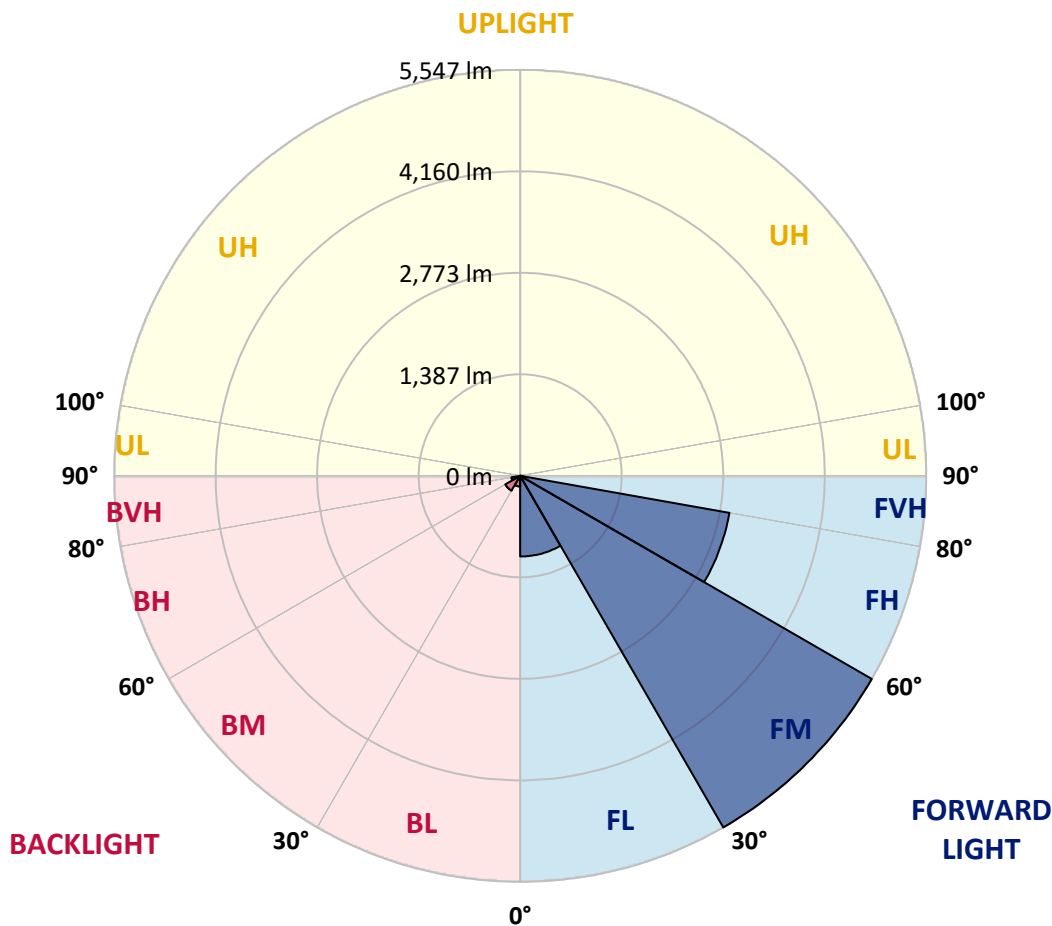
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1102.1	10.9			
FM (30°-60°)	5547.0	55.0			
FH (60°-80°)	2903.7	28.8			G2/5000
FVH (80°-90°)	36.0	0.4			G1/100
BL (0°-30°)	146.2	1.4	B1/500		
BM (30°-60°)	234.8	2.3	B1/1000		
BH (60°-80°)	122.0	1.2	B1/500		G1/500
BVH (80°-90°)	0.5	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-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1
2.5°	1547.0	1531.7	1516.5	1499.0	1459.8	1392.3	1307.3	1215.8	1102.5	1082.9	991.4
5°	1878.1	1871.6	1856.5	1832.4	1788.8	1714.8	1618.9	1483.7	1294.2	1261.5	1067.7
7.5°	2111.3	2106.9	2093.9	2065.5	2026.3	1952.3	1852.1	1706.1	1485.9	1448.9	1163.5
10°	2320.4	2318.3	2307.4	2281.3	2242.0	2161.3	2054.6	1902.1	1669.1	1627.6	1274.6
12.5°	2510.0	2512.2	2507.8	2494.8	2466.4	2390.1	2268.2	2102.5	1845.5	1799.7	1407.6
15°	2621.1	2627.6	2645.1	2671.3	2680.0	2619.0	2492.6	2309.6	2026.3	1987.1	1560.0
17.5°	2584.1	2590.6	2645.1	2734.4	2819.4	2828.1	2714.9	2505.7	2205.0	2165.7	1710.4
20°	2494.8	2503.4	2560.2	2682.2	2847.8	2963.2	2917.4	2719.3	2375.0	2327.0	1854.2
22.5°	2595.0	2595.0	2612.4	2686.4	2836.8	3017.7	3078.7	2932.7	2549.2	2490.4	1998.1
25°	2939.3	2932.7	2895.7	2865.3	2913.1	3074.3	3200.7	3150.6	2754.1	2686.4	2150.5
27.5°	3375.0	3405.5	3335.8	3224.7	3115.7	3185.5	3309.7	3366.3	2980.7	2910.8	2307.4
30°	3863.1	3876.2	3793.4	3645.2	3453.4	3386.0	3438.2	3551.5	3226.9	3150.6	2470.8
32.5°	4303.1	4292.4	4222.7	4067.9	3830.4	3684.4	3603.8	3699.6	3494.8	3407.7	2638.6
35°	4693.2	4702.0	4617.0	4438.3	4205.2	4050.5	3858.7	3867.4	3795.5	3695.3	2832.5
37.5°	5044.1	5028.7	4948.2	4769.5	4558.2	4390.4	4187.7	4041.7	4124.5	4019.9	3050.4
40°	5329.4	5314.2	5229.2	5054.9	4856.7	4719.4	4560.4	4274.9	4471.0	4351.1	3283.6
42.5°	5556.1	5538.7	5466.7	5299.0	5107.3	4985.2	4908.9	4562.5	4841.4	4721.5	3545.0
45°	5667.2	5652.0	5608.4	5482.0	5314.2	5207.4	5244.5	4893.7	5238.0	5137.7	3832.6
47.5°	5536.5	5529.9	5580.0	5558.2	5462.4	5405.7	5534.3	5255.4	5654.0	5556.1	4163.8
50°	5139.9	5150.8	5296.8	5477.6	5523.4	5590.9	5771.7	5636.6	6100.8	5996.1	4545.0
52.5°	4161.5	4235.7	4675.8	5111.5	5449.3	5704.2	6050.7	6181.4	6828.4	6726.1	5139.9
55°	3107.0	3137.5	3616.9	4362.0	5150.8	5695.4	6257.6	6501.7	7188.0	7083.4	5296.8
57.5°	2464.3	2475.2	2712.7	3473.2	4536.3	5499.4	6366.5	6617.2	7344.9	7257.8	5529.9
60°	1934.8	1947.9	2120.0	2643.0	3671.3	4969.9	6209.7	6717.4	7652.1	7582.4	5937.3
62.5°	1505.6	1518.7	1623.3	1930.5	2754.1	4155.0	5893.8	6878.6	8236.1	8203.4	6604.0
65°	1165.7	1170.0	1242.0	1385.7	1945.7	3272.7	5508.1	7028.9	9024.9	8996.4	7144.5
67.5°	860.6	867.2	917.3	1006.6	1313.9	2350.9	4876.2	6913.5	9619.6	9536.8	7340.6
69°	695.0	701.6	745.1	817.0	1037.1	1852.1	4299.0	6628.1	9708.9	9630.5	7216.3
70°	594.8	599.2	642.8	703.7	884.6	1573.2	3841.3	6381.9	9591.4	9515.1	6933.0
72.5°	381.4	403.0	446.7	485.8	586.0	1041.5	2592.8	5292.4	8275.3	8144.5	5429.6
75°	211.3	217.9	296.3	344.2	390.0	677.6	1442.4	3300.9	5264.1	5172.6	2904.4
77.5°	174.3	178.6	209.1	261.4	261.4	379.1	544.6	1300.7	2002.4	1806.3	786.5
80°	122.1	126.4	159.1	172.1	187.4	213.5	176.5	285.3	309.4	274.6	117.7
82.5°	85.0	89.4	108.9	141.6	150.3	100.2	65.3	85.0	89.4	89.4	45.8
85°	15.3	21.8	80.7	117.7	89.4	30.5	37.0	30.5	28.3	30.5	10.9
87.5°	0.0	0.0	50.1	56.6	48.0	13.1	15.3	10.9	6.5	8.7	4.4
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°	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1
2.5°	945.6	899.9	821.4	764.9	716.8	679.8	664.6	640.6	623.1	631.8	620.9
5°	971.8	891.1	764.9	684.2	627.4	579.6	540.4	509.8	485.8	481.5	477.1
7.5°	1013.2	897.7	732.1	631.8	546.9	472.8	411.8	366.0	331.2	331.2	318.2
10°	1069.8	915.1	712.5	579.6	453.2	353.0	291.9	248.3	231.0	228.8	224.4
12.5°	1148.2	947.9	697.2	512.0	353.0	257.1	220.0	204.9	198.3	196.1	193.9
15°	1255.1	995.7	679.8	429.3	268.0	211.3	196.1	183.0	176.5	174.3	172.1
17.5°	1357.4	1039.3	642.8	344.2	217.9	191.7	174.3	163.5	154.7	152.5	152.5
20°	1453.2	1076.3	579.6	268.0	196.1	172.1	154.7	141.6	132.9	130.8	130.8
22.5°	1553.5	1106.9	501.2	217.9	178.6	152.5	135.1	122.1	113.3	111.1	108.9
25°	1660.3	1128.6	411.8	193.9	161.2	135.1	115.5	104.6	98.0	95.8	93.8
27.5°	1775.8	1137.4	326.8	176.5	141.6	117.7	100.2	89.4	85.0	82.8	82.8
30°	1880.4	1128.6	252.7	156.9	124.2	102.3	87.2	78.4	74.1	71.9	71.9
32.5°	1989.3	1106.9	202.6	139.5	108.9	87.2	74.1	67.5	65.3	63.2	63.2
35°	2104.8	1078.5	174.3	124.2	93.8	76.3	65.3	60.9	58.8	56.6	56.6
37.5°	2239.9	1043.7	159.1	111.1	82.8	67.5	56.6	54.5	52.3	52.3	52.3
40°	2392.3	1000.0	148.1	100.2	74.1	58.8	50.1	48.0	45.8	45.8	45.8
42.5°	2553.6	950.0	137.2	89.4	65.3	50.1	43.6	43.6	41.4	41.4	39.3
45°	2734.4	899.9	126.4	78.4	56.6	43.6	37.0	34.9	34.9	32.7	32.7
47.5°	2948.1	854.1	115.5	69.7	50.1	37.0	32.7	30.5	28.3	26.1	26.1
50°	3248.6	849.7	102.3	60.9	45.8	30.5	26.1	23.9	21.8	19.5	19.5
52.5°	3547.2	810.4	87.2	50.1	37.0	26.1	19.5	17.5	15.3	15.3	13.1
55°	3614.8	745.1	76.3	43.6	28.3	19.5	15.3	10.9	10.9	8.7	8.7
57.5°	3762.9	714.7	65.3	34.9	21.8	15.3	8.7	6.5	6.5	6.5	6.5
60°	4054.8	706.0	56.6	30.5	15.3	10.9	6.5	4.4	4.4	2.1	2.1
62.5°	4457.9	697.2	48.0	26.1	10.9	6.5	4.4	2.1	0.0	0.0	0.0
65°	4680.1	638.4	39.3	19.5	8.7	6.5	2.1	0.0	0.0	0.0	0.0
67.5°	4621.3	527.2	34.9	13.1	6.5	4.4	2.1	0.0	0.0	0.0	0.0
69°	4375.1	444.4	28.3	10.9	6.5	4.4	2.1	0.0	0.0	0.0	0.0
70°	4078.7	383.5	26.1	8.7	4.4	2.1	2.1	0.0	0.0	0.0	0.0
72.5°	2895.7	200.5	17.5	6.5	4.4	2.1	0.0	0.0	0.0	0.0	0.0
75°	1353.0	89.4	10.9	4.4	2.1	2.1	0.0	0.0	0.0	0.0	0.0
77.5°	298.5	41.4	6.5	4.4	2.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	56.6	15.3	4.4	2.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	19.5	6.5	2.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.5	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	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)