

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: P236982

Luminaire Tested: **ARCH-L-AF72-90-D-U-T2R-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P236982
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-90-D-U-T2R-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 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: 10435 lumens
Efficiency: N/A
Efficacy: 112.2 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

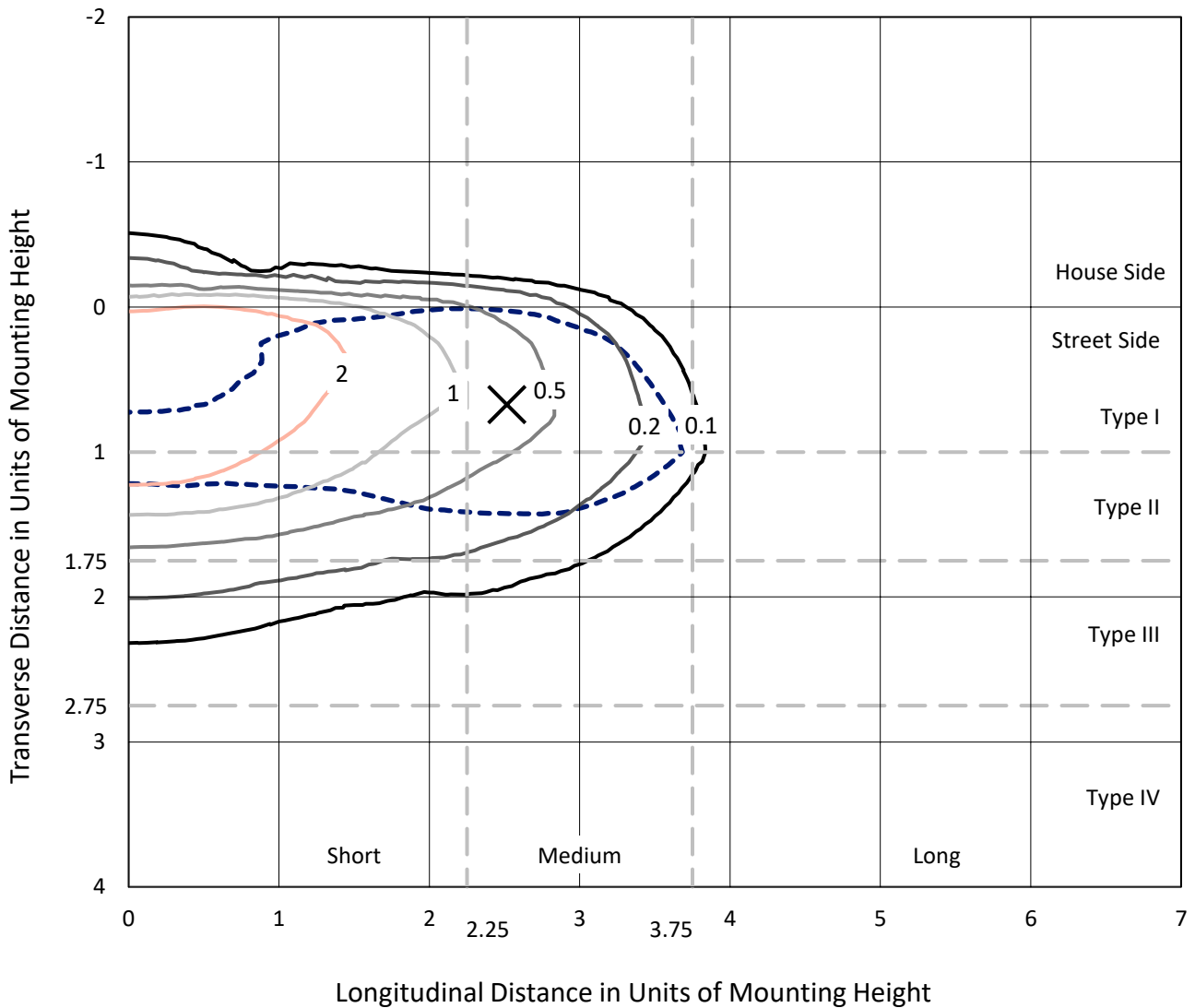
Input Watts (W): 93
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P236982
 CATALOG NUMBER: ARCH-L-AF72-90-D-U-T2R-7050-HSS

Iso-Footcandle Lines of Horizontal Illumination

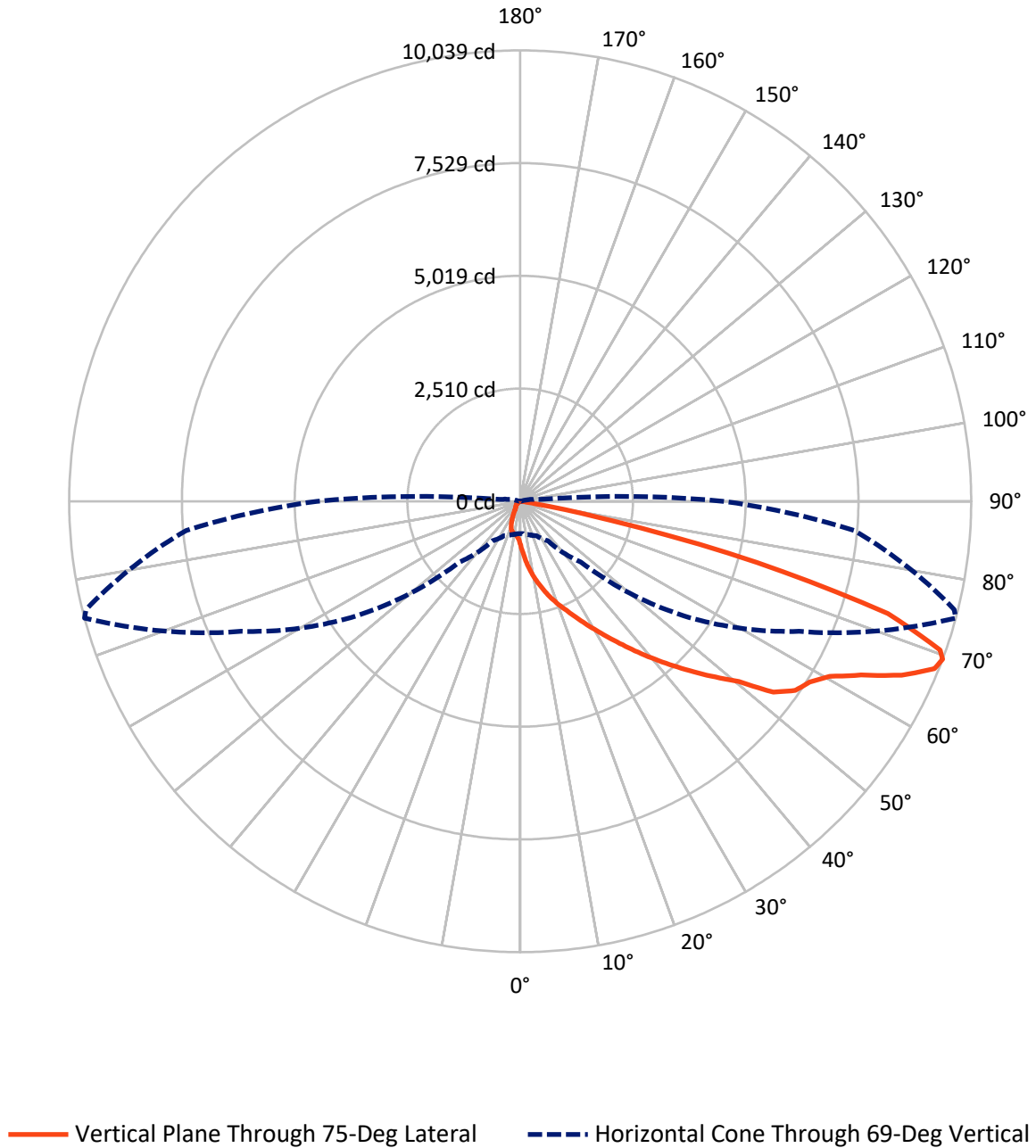
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc
 Type II - Medium - N/A

REPORT NUMBER: P236982
CATALOG NUMBER: ARCH-L-AF72-90-D-U-T2R-7050-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P236982

CATALOG NUMBER: ARCH-L-AF72-90-D-U-T2R-7050-HSS

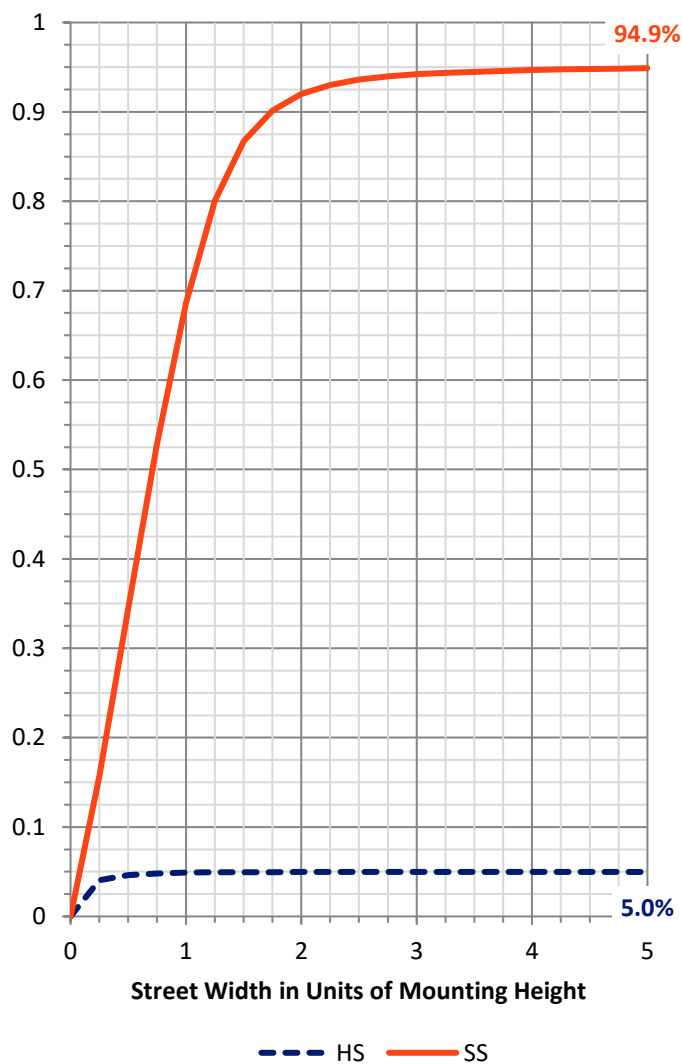
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	520.7	0.0	520.7
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	9914.4	0.0	9914.4
	% Fixture	95.0	0.0	95.0
Total	Lumens	10435.0	0.0	10435.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.2	1.1
10°-20°	404.8	3.9
20°-30°	772.7	7.4
30°-40°	1386.1	13.3
40°-50°	2123.7	20.4
50°-60°	2468.2	23.7
60°-70°	2185.7	20.9
70°-80°	942.8	9.0
80°-90°	37.8	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°	10435.0	100.0
0°-180°	10435.0	100.0

Coefficient of Utilization



REPORT NUMBER: P236982

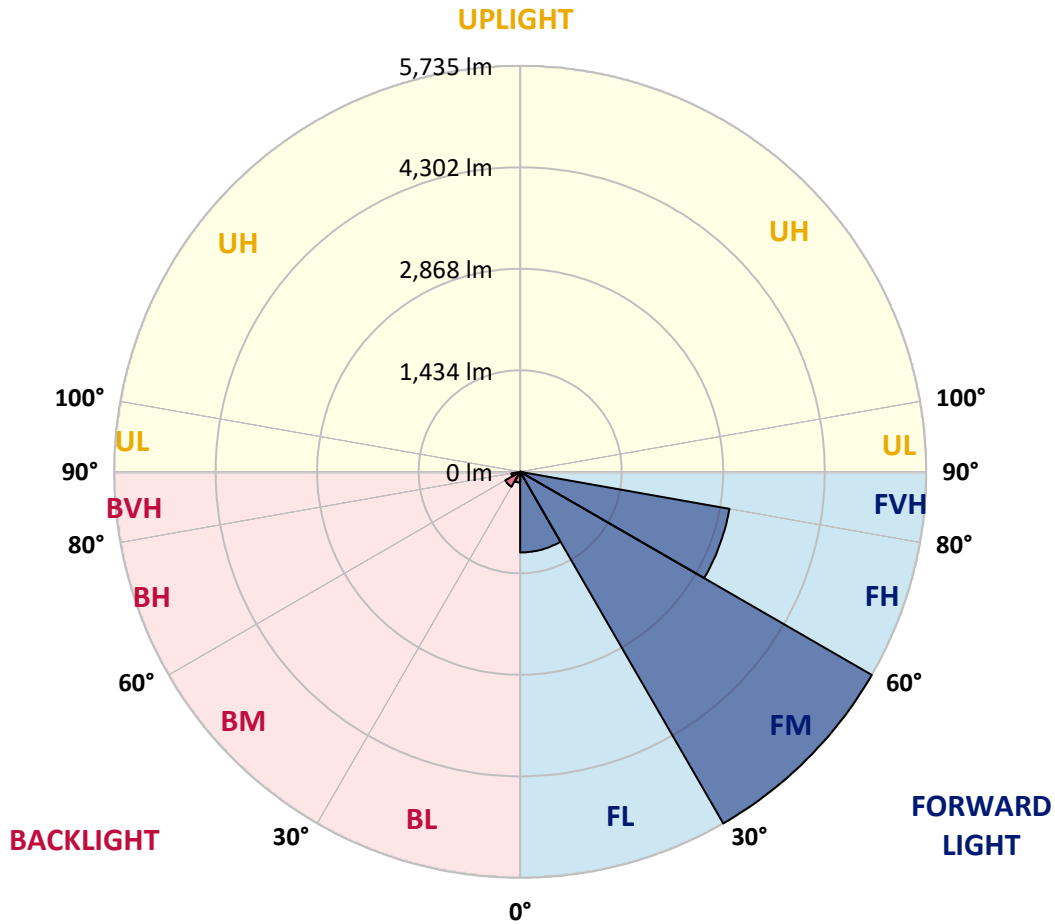
CATALOG NUMBER: ARCH-L-AF72-90-D-U-T2R-7050-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1139.5	10.9			
FM (30°-60°)	5735.3	55.0			
FH (60°-80°)	3002.3	28.8			G2/5000
FVH (80°-90°)	37.2	0.4			G1/100
BL (0°-30°)	151.2	1.4	B1/500		
BM (30°-60°)	242.7	2.3	B1/1000		
BH (60°-80°)	126.2	1.2	B1/500		G1/500
BVH (80°-90°)	0.6	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





REPORT NUMBER: P236982

CATALOG NUMBER: ARCH-L-AF72-90-D-U-T2R-7050-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	971.0	971.0	971.0	971.0	971.0	971.0	971.0	971.0	971.0	971.0	971.0
2.5°	1599.5	1583.7	1568.0	1550.0	1509.4	1439.6	1351.7	1257.1	1139.9	1119.7	1025.0
5°	1941.9	1935.2	1919.4	1894.6	1849.6	1773.0	1673.9	1534.2	1338.2	1304.4	1103.9
7.5°	2183.0	2178.5	2165.0	2135.7	2095.1	2018.5	1914.9	1764.0	1536.4	1498.1	1203.0
10°	2399.3	2397.0	2385.8	2358.7	2318.2	2234.8	2124.4	1966.7	1725.7	1682.9	1317.9
12.5°	2595.3	2597.5	2593.0	2579.5	2550.2	2471.4	2345.2	2174.0	1908.2	1860.8	1455.3
15°	2710.2	2716.9	2734.9	2762.0	2771.0	2707.9	2577.2	2388.0	2095.1	2054.6	1613.0
17.5°	2671.9	2678.6	2734.9	2827.3	2915.2	2924.2	2807.0	2590.8	2279.9	2239.3	1768.5
20°	2579.5	2588.5	2647.1	2773.2	2944.5	3063.9	3016.5	2811.5	2455.6	2406.0	1917.2
22.5°	2683.1	2683.1	2701.2	2777.7	2933.2	3120.2	3183.3	3032.3	2635.8	2575.0	2065.9
25°	3039.1	3032.3	2994.0	2962.5	3012.0	3178.8	3309.4	3257.6	2847.6	2777.7	2223.6
27.5°	3489.6	3521.2	3449.1	3334.2	3221.6	3293.6	3422.1	3480.6	3081.9	3009.8	2385.8
30°	3994.3	4007.8	3922.2	3769.0	3570.7	3500.9	3555.0	3672.1	3336.5	3257.6	2554.7
32.5°	4449.4	4438.1	4366.0	4206.0	3960.5	3809.5	3726.2	3825.3	3613.6	3523.4	2728.2
35°	4852.6	4861.6	4773.8	4589.0	4348.0	4188.0	3989.8	3998.8	3924.4	3820.8	2928.7
37.5°	5215.3	5199.5	5116.2	4931.5	4712.9	4539.5	4330.0	4179.0	4264.6	4156.5	3154.0
40°	5510.4	5494.7	5406.8	5226.6	5021.6	4879.6	4715.2	4420.1	4622.8	4498.9	3395.0
42.5°	5744.7	5726.7	5652.4	5478.9	5280.7	5154.5	5075.6	4717.4	5005.8	4881.9	3665.4
45°	5859.6	5843.9	5798.8	5668.1	5494.7	5384.3	5422.6	5059.9	5415.8	5312.2	3962.7
47.5°	5724.5	5717.7	5769.5	5747.0	5647.9	5589.3	5722.2	5433.8	5846.1	5744.7	4305.2
50°	5314.4	5325.7	5476.6	5663.6	5710.9	5780.8	5967.8	5828.1	6307.9	6199.8	4699.4
52.5°	4302.9	4379.5	4834.6	5285.2	5634.3	5897.9	6256.1	6391.3	7060.4	6954.5	5314.4
55°	3212.5	3244.1	3739.7	4510.2	5325.7	5888.9	6470.1	6722.5	7432.1	7324.0	5476.6
57.5°	2548.0	2559.2	2804.8	3591.0	4690.4	5686.2	6582.8	6841.9	7594.3	7504.2	5717.7
60°	2000.5	2014.0	2192.0	2732.7	3796.0	5138.7	6420.6	6945.5	7912.0	7839.9	6139.0
62.5°	1556.7	1570.2	1678.4	1996.0	2847.6	4296.2	6093.9	7112.2	8515.7	8481.9	6828.3
65°	1205.3	1209.8	1284.1	1432.8	2011.8	3383.8	5695.2	7267.7	9331.3	9302.0	7387.1
67.5°	889.9	896.6	948.4	1040.8	1358.5	2430.8	5041.8	7148.3	9946.3	9860.7	7589.8
69°	718.7	725.4	770.5	844.8	1072.4	1914.9	4444.8	6853.1	10038.6	9957.5	7461.4
70°	615.0	619.5	664.6	727.7	914.7	1626.5	3971.8	6598.6	9917.0	9838.1	7168.5
72.5°	394.2	416.8	461.8	502.4	606.0	1076.9	2680.9	5472.1	8556.3	8421.1	5614.1
75°	218.5	225.3	306.4	355.9	403.3	700.6	1491.4	3413.0	5442.9	5348.2	3003.0
77.5°	180.2	184.7	216.3	270.3	270.3	392.0	563.2	1344.9	2070.4	1867.6	813.3
80°	126.2	130.7	164.5	178.0	193.7	220.8	182.5	295.1	319.9	283.9	121.7
82.5°	87.9	92.4	112.6	146.4	155.4	103.6	67.6	87.9	92.4	92.4	47.3
85°	15.8	22.5	83.4	121.7	92.4	31.5	38.3	31.5	29.3	31.5	11.3
87.5°	0.0	0.0	51.8	58.6	49.6	13.5	15.8	11.3	6.8	9.0	4.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P236982

CATALOG NUMBER: ARCH-L-AF72-90-D-U-T2R-7050-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	971.0	971.0	971.0	971.0	971.0	971.0	971.0	971.0	971.0	971.0	971.0
2.5°	977.7	930.4	849.3	790.7	741.2	702.9	687.1	662.3	644.3	653.3	642.1
5°	1004.8	921.4	790.7	707.4	648.8	599.3	558.7	527.2	502.4	497.9	493.4
7.5°	1047.6	928.2	757.0	653.3	565.5	488.9	425.8	378.5	342.4	342.4	328.9
10°	1106.1	946.2	736.7	599.3	468.6	365.0	301.9	256.8	238.8	236.5	232.0
12.5°	1187.2	980.0	720.9	529.4	365.0	265.8	227.5	211.8	205.0	202.8	200.5
15°	1297.6	1029.5	702.9	443.8	277.1	218.5	202.8	189.2	182.5	180.2	178.0
17.5°	1403.5	1074.6	664.6	355.9	225.3	198.2	180.2	169.0	160.0	157.7	157.7
20°	1502.6	1112.9	599.3	277.1	202.8	178.0	160.0	146.4	137.4	135.2	135.2
22.5°	1606.3	1144.4	518.2	225.3	184.7	157.7	139.7	126.2	117.1	114.9	112.6
25°	1716.7	1167.0	425.8	200.5	166.7	139.7	119.4	108.1	101.4	99.1	96.9
27.5°	1836.1	1176.0	337.9	182.5	146.4	121.7	103.6	92.4	87.9	85.6	85.6
30°	1944.2	1167.0	261.3	162.2	128.4	105.9	90.1	81.1	76.6	74.3	74.3
32.5°	2056.8	1144.4	209.5	144.2	112.6	90.1	76.6	69.8	67.6	65.3	65.3
35°	2176.2	1115.2	180.2	128.4	96.9	78.8	67.6	63.1	60.8	58.6	58.6
37.5°	2315.9	1079.1	164.5	114.9	85.6	69.8	58.6	56.3	54.1	54.1	54.1
40°	2473.6	1034.1	153.2	103.6	76.6	60.8	51.8	49.6	47.3	47.3	47.3
42.5°	2640.3	982.2	141.9	92.4	67.6	51.8	45.1	45.1	42.8	42.8	40.6
45°	2827.3	930.4	130.7	81.1	58.6	45.1	38.3	36.0	36.0	33.8	33.8
47.5°	3048.1	883.1	119.4	72.1	51.8	38.3	33.8	31.5	29.3	27.0	27.0
50°	3359.0	878.6	105.9	63.1	47.3	31.5	27.0	24.8	22.5	20.3	20.3
52.5°	3667.6	838.1	90.1	51.8	38.3	27.0	20.3	18.0	15.8	15.8	13.5
55°	3737.5	770.5	78.8	45.1	29.3	20.3	15.8	11.3	11.3	9.0	9.0
57.5°	3890.6	738.9	67.6	36.0	22.5	15.8	9.0	6.8	6.8	6.8	6.8
60°	4192.5	729.9	58.6	31.5	15.8	11.3	6.8	4.5	4.5	2.3	2.3
62.5°	4609.3	720.9	49.6	27.0	11.3	6.8	4.5	2.3	0.0	0.0	0.0
65°	4839.1	660.1	40.6	20.3	9.0	6.8	2.3	0.0	0.0	0.0	0.0
67.5°	4778.3	545.2	36.0	13.5	6.8	4.5	2.3	0.0	0.0	0.0	0.0
69°	4523.7	459.6	29.3	11.3	6.8	4.5	2.3	0.0	0.0	0.0	0.0
70°	4217.3	396.5	27.0	9.0	4.5	2.3	2.3	0.0	0.0	0.0	0.0
72.5°	2994.0	207.3	18.0	6.8	4.5	2.3	0.0	0.0	0.0	0.0	0.0
75°	1399.0	92.4	11.3	4.5	2.3	2.3	0.0	0.0	0.0	0.0	0.0
77.5°	308.6	42.8	6.8	4.5	2.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	58.6	15.8	4.5	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	20.3	6.8	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.8	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.3	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)