

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: P258104

Luminaire Tested: **ARCH-L-AF72-280-D-U-T2U-7050-HSS**

Issue Date: 8/21/2018

Test Information

Test Method: LM-79-08
Report Number: P258104
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 8/21/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-280-D-U-T2U-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1180mA 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: 20828 lumens
Efficiency: N/A
Efficacy: 74.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

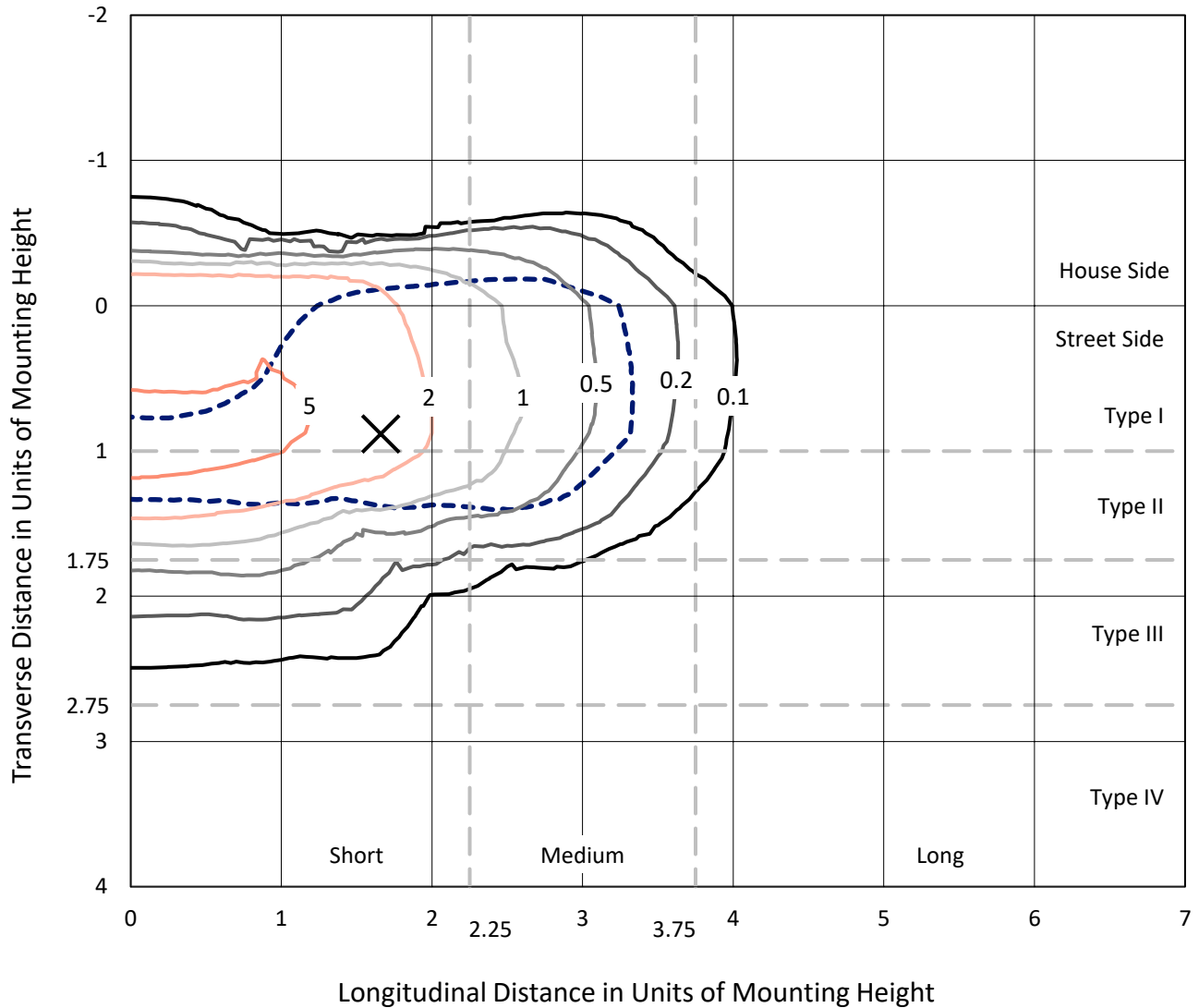
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P258104
 CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2U-7050-HSS

Iso-Footcandle Lines of Horizontal Illumination

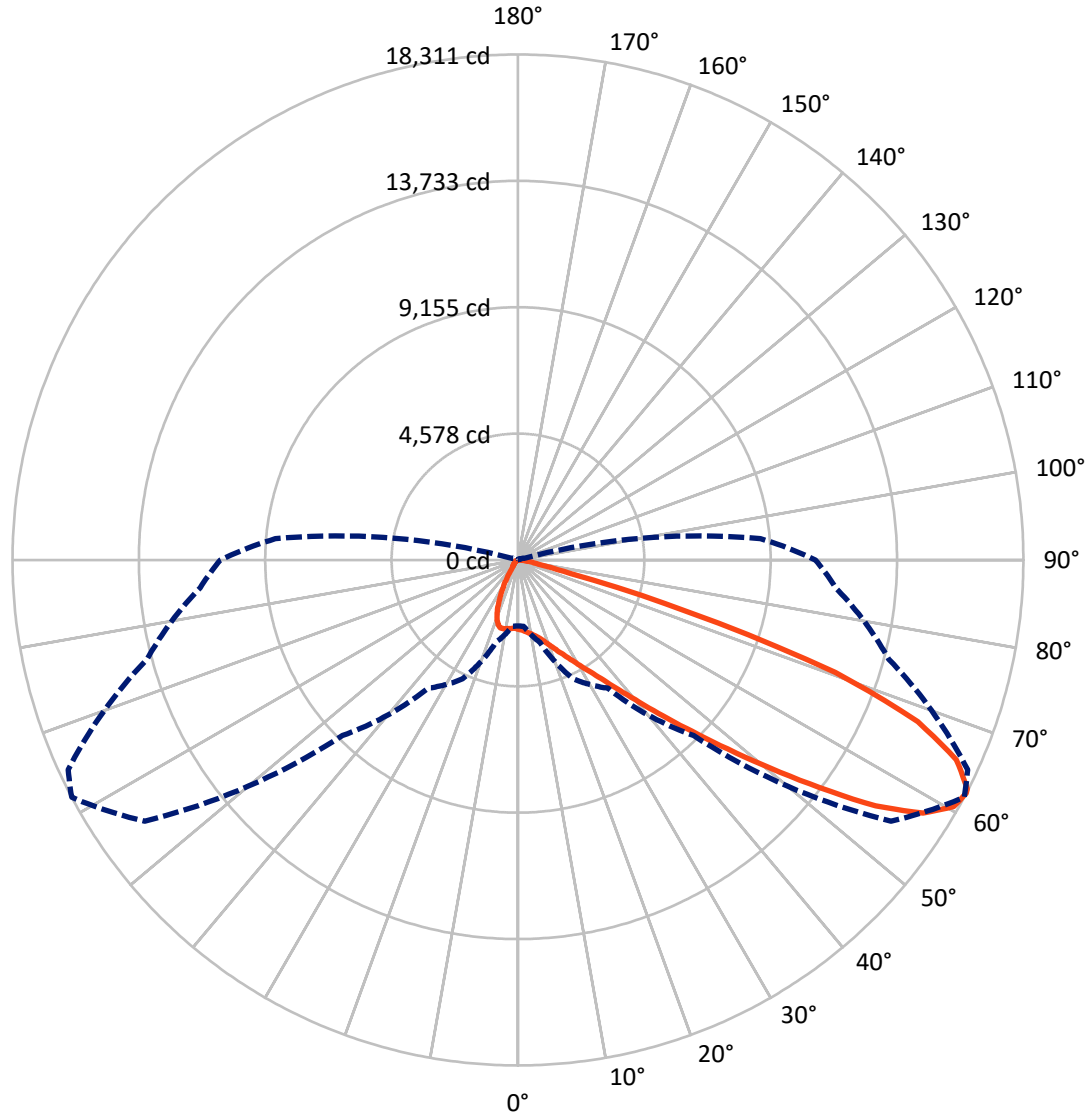
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc
 Type II - Short - N/A

REPORT NUMBER: P258104
CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2U-7050-HSS

Luminous Intensity Polar Plot



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

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 CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2U-7050-HSS

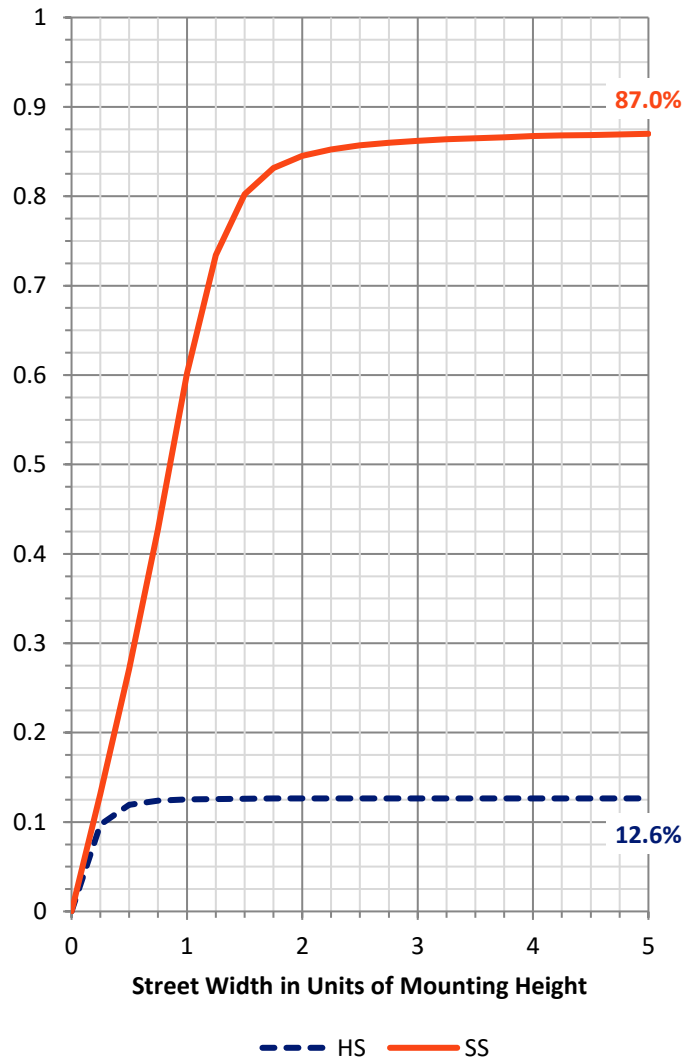
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2663.1	0.0	2663.1
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	18164.9	0.0	18164.9
	% Fixture	87.2	0.0	87.2
Total	Lumens	20828.0	0.0	20828.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.4	1.2
10°-20°	674.3	3.2
20°-30°	1132.4	5.4
30°-40°	2170.7	10.4
40°-50°	4433.7	21.3
50°-60°	5867.4	28.2
60°-70°	4558.0	21.9
70°-80°	1645.2	7.9
80°-90°	104.9	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°	20828.0	100.0
0°-180°	20828.0	100.0



REPORT NUMBER: P258104

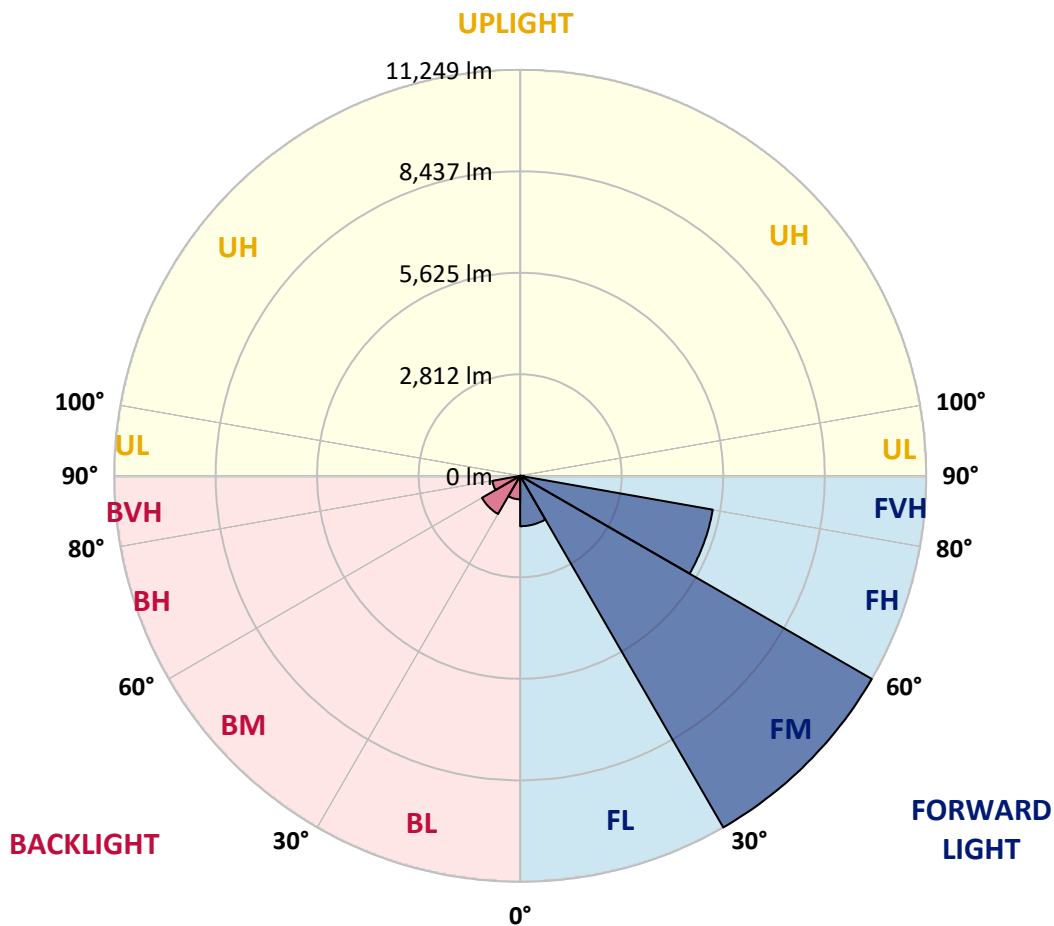
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1396.3	6.7			
FM (30°-60°)	11249.3	54.0			
FH (60°-80°)	5419.0	26.0			G3/7500
FVH (80°-90°)	100.3	0.5			G2/225
BL (0°-30°)	651.8	3.1	B2/1000		
BM (30°-60°)	1222.6	5.9	B2/2500		
BH (60°-80°)	784.2	3.8	B2/1000		G2/1000
BVH (80°-90°)	4.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0
2.5°	2575.6	2570.4	2565.3	2560.2	2560.2	2555.1	2550.0	2539.7	2529.5	2519.2	2514.1
5°	2621.7	2616.5	2611.4	2616.5	2611.4	2611.4	2606.3	2596.1	2585.8	2570.4	2555.1
7.5°	2657.5	2652.4	2647.3	2652.4	2657.5	2662.6	2667.7	2657.5	2652.4	2631.9	2616.5
10°	2703.6	2698.5	2693.3	2703.6	2703.6	2729.2	2734.3	2729.2	2724.1	2708.7	2683.1
12.5°	2770.1	2775.3	2775.3	2785.5	2795.7	2826.5	2836.7	2821.3	2821.3	2800.9	2770.1
15°	2893.0	2893.0	2893.0	2903.3	2908.4	2949.4	2959.6	2944.2	2954.5	2918.6	2887.9
17.5°	3010.8	3015.9	3026.2	3046.6	3046.6	3082.5	3103.0	3103.0	3123.5	3077.4	3036.4
20°	3128.6	3133.7	3149.1	3195.1	3195.1	3241.2	3277.1	3292.4	3312.9	3266.8	3195.1
22.5°	3256.6	3256.6	3282.2	3353.9	3338.5	3430.7	3497.2	3522.8	3543.3	3481.9	3369.2
25°	3451.2	3430.7	3451.2	3517.7	3507.5	3635.5	3758.4	3784.0	3809.6	3737.9	3568.9
27.5°	3819.8	3789.1	3717.4	3722.5	3722.5	3871.0	4045.1	4081.0	4096.3	4034.9	3825.0
30°	4557.2	4557.2	4290.9	4111.7	3993.9	4127.1	4372.8	4434.3	4454.8	4362.6	4086.1
32.5°	5842.4	5842.4	5350.8	4895.1	4449.6	4449.6	4731.3	4843.9	4864.4	4756.9	4434.3
35°	7480.9	7470.7	6733.3	6108.7	5238.2	4910.5	5151.1	5340.6	5402.0	5258.7	4884.9
37.5°	9221.9	9155.3	8361.6	7644.8	6451.7	5647.8	5719.5	5970.4	6026.7	5909.0	5468.6
40°	10635.1	10558.3	9918.2	9319.2	8018.6	6825.5	6538.8	6769.2	6835.8	6671.9	6165.0
42.5°	11915.2	11725.8	11285.4	10855.3	9821.0	8863.4	7629.4	7721.6	7793.3	7619.2	6948.4
45°	12842.0	12550.1	12324.8	12191.7	11643.8	11101.1	9042.7	8858.3	8883.9	8668.9	7803.5
47.5°	12867.6	12662.8	12683.3	13031.5	13256.8	13236.3	10880.9	10225.5	10128.2	9769.8	8714.9
50°	11638.7	11756.5	12130.3	13123.6	14342.3	15079.6	13067.3	11843.5	11551.7	10906.5	9621.3
52.5°	9590.5	9774.9	10476.4	12150.7	14501.0	16293.2	15335.6	13692.0	13169.7	12033.0	10317.6
55°	7511.7	7521.9	8259.2	9964.3	13441.1	16513.3	17148.3	15724.8	14926.0	12888.1	10778.5
57.5°	5166.5	5448.1	6385.2	7532.1	11049.9	15417.6	17829.3	17301.9	16272.7	13415.5	11101.1
60°	3384.6	3400.0	4490.6	5816.8	7521.9	12545.0	17414.5	18136.5	17363.3	13727.8	11321.2
62°	2386.1	2411.7	3087.6	4751.7	5668.3	8991.5	16498.0	18310.6	17977.8	13912.2	11551.7
62.5°	2212.0	2232.5	2800.9	4485.5	5325.2	8064.7	16170.3	18269.6	18070.0	13973.6	11633.6
65°	1623.2	1623.2	1833.1	3082.5	3901.8	4357.5	13702.2	17455.5	17947.1	14465.2	11940.8
67.5°	1254.5	1264.7	1336.4	1899.7	2944.2	2642.1	8745.7	15622.4	16667.0	15192.3	12114.9
70°	1080.4	1075.3	1126.5	1259.6	2125.0	1756.3	3850.6	12191.7	13958.3	15007.9	11956.2
72.5°	798.8	803.9	921.7	1106.0	1479.8	1141.9	1740.9	6472.2	9052.9	11746.2	10246.0
75°	512.0	517.2	650.3	870.5	1065.0	747.6	1003.6	1930.4	3707.2	6513.2	6267.4
77.5°	343.1	353.3	425.0	609.3	931.9	466.0	629.8	809.0	1116.3	2442.4	2247.9
80°	230.4	230.4	271.4	409.6	588.8	389.2	337.9	537.6	578.6	757.8	378.9
82.5°	153.6	153.6	179.2	271.4	384.0	348.2	204.8	291.9	337.9	378.9	133.1
85°	92.2	92.2	122.9	169.0	250.9	194.6	133.1	163.9	174.1	240.7	71.7
87.5°	56.3	51.2	81.9	117.8	133.1	117.8	87.0	87.0	92.2	133.1	35.8
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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CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2U-7050-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0
2.5°	2503.9	2498.8	2493.6	2483.4	2468.0	2457.8	2447.6	2437.3	2427.1	2427.1	2442.4
5°	2550.0	2534.6	2514.1	2493.6	2462.9	2442.4	2427.1	2406.6	2396.4	2396.4	2401.5
7.5°	2606.3	2590.9	2555.1	2519.2	2473.2	2437.3	2401.5	2355.4	2319.5	2304.2	2319.5
10°	2667.7	2647.3	2596.1	2539.7	2488.5	2396.4	2278.6	2135.2	2012.3	1956.0	1981.6
12.5°	2744.5	2718.9	2657.5	2580.7	2462.9	2237.6	1945.8	1612.9	1403.0	1305.7	1326.2
15°	2857.2	2821.3	2734.3	2616.5	2355.4	1869.0	1392.8	1008.7	814.1	732.2	742.5
17.5°	2990.3	2944.2	2826.5	2606.3	2078.9	1346.7	829.5	588.8	506.9	486.4	486.4
20°	3133.7	3072.2	2918.6	2529.5	1659.0	844.9	517.2	450.6	419.9	404.5	404.5
22.5°	3282.2	3200.3	2995.4	2350.3	1182.8	527.4	425.0	378.9	343.1	327.7	327.7
25°	3461.4	3353.9	3072.2	2037.9	752.7	425.0	363.5	317.5	281.6	261.1	266.3
27.5°	3671.3	3533.1	3138.8	1648.8	486.4	368.7	302.1	256.0	225.3	215.1	215.1
30°	3891.5	3727.7	3154.2	1234.0	394.3	317.5	250.9	209.9	189.5	179.2	179.2
32.5°	4193.6	3978.6	3108.1	819.3	332.8	266.3	209.9	174.1	158.7	153.6	153.6
35°	4593.0	4306.3	3000.6	506.9	281.6	220.2	174.1	153.6	138.3	133.1	133.1
37.5°	5099.9	4762.0	2811.1	348.2	240.7	179.2	148.5	133.1	122.9	117.8	117.8
40°	5775.8	5315.0	2565.3	302.1	204.8	153.6	128.0	117.8	107.5	107.5	107.5
42.5°	6492.7	5985.8	2247.9	266.3	174.1	133.1	112.6	102.4	97.3	92.2	92.2
45°	7276.1	6671.9	1853.6	235.5	148.5	117.8	102.4	87.0	81.9	81.9	81.9
47.5°	8054.4	7378.5	1423.5	204.8	128.0	102.4	87.0	76.8	71.7	66.6	66.6
50°	8853.2	8018.6	1044.6	179.2	112.6	92.2	76.8	66.6	56.3	51.2	51.2
52.5°	9431.8	8402.6	762.9	153.6	97.3	76.8	61.4	51.2	41.0	35.8	35.8
55°	9856.8	8638.1	558.1	128.0	87.0	66.6	51.2	41.0	30.7	30.7	25.6
57.5°	10189.6	8750.8	419.9	112.6	76.8	56.3	41.0	30.7	25.6	20.5	20.5
60°	10445.6	8755.9	312.3	92.2	66.6	46.1	30.7	20.5	15.4	15.4	15.4
62°	10783.6	8822.5	256.0	76.8	61.4	41.0	25.6	15.4	10.2	5.1	5.1
62.5°	10880.9	8848.1	245.8	76.8	56.3	35.8	20.5	15.4	10.2	5.1	5.1
65°	11331.5	8894.2	189.5	61.4	46.1	30.7	15.4	10.2	0.0	0.0	0.0
67.5°	11741.1	8822.5	138.3	46.1	35.8	20.5	15.4	5.1	0.0	0.0	0.0
70°	11700.2	8330.9	97.3	30.7	25.6	15.4	10.2	0.0	0.0	0.0	0.0
72.5°	9641.7	6236.7	66.6	25.6	15.4	10.2	5.1	0.0	0.0	0.0	0.0
75°	5821.9	2729.2	46.1	15.4	15.4	10.2	5.1	0.0	0.0	0.0	0.0
77.5°	1909.9	988.2	30.7	10.2	10.2	5.1	5.1	0.0	0.0	0.0	0.0
80°	312.3	163.9	15.4	10.2	10.2	5.1	5.1	0.0	0.0	0.0	0.0
82.5°	97.3	41.0	10.2	10.2	5.1	5.1	0.0	0.0	0.0	0.0	0.0
85°	35.8	15.4	10.2	10.2	5.1	5.1	0.0	0.0	0.0	0.0	0.0
87.5°	15.4	10.2	10.2	10.2	5.1	5.1	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)