

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: P237480

Luminaire Tested: **ARCH-L-AF72-270-D-U-T4W-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237480
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-270-D-U-T4W-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21412 lumens
Efficiency: N/A
Efficacy: 78.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G4

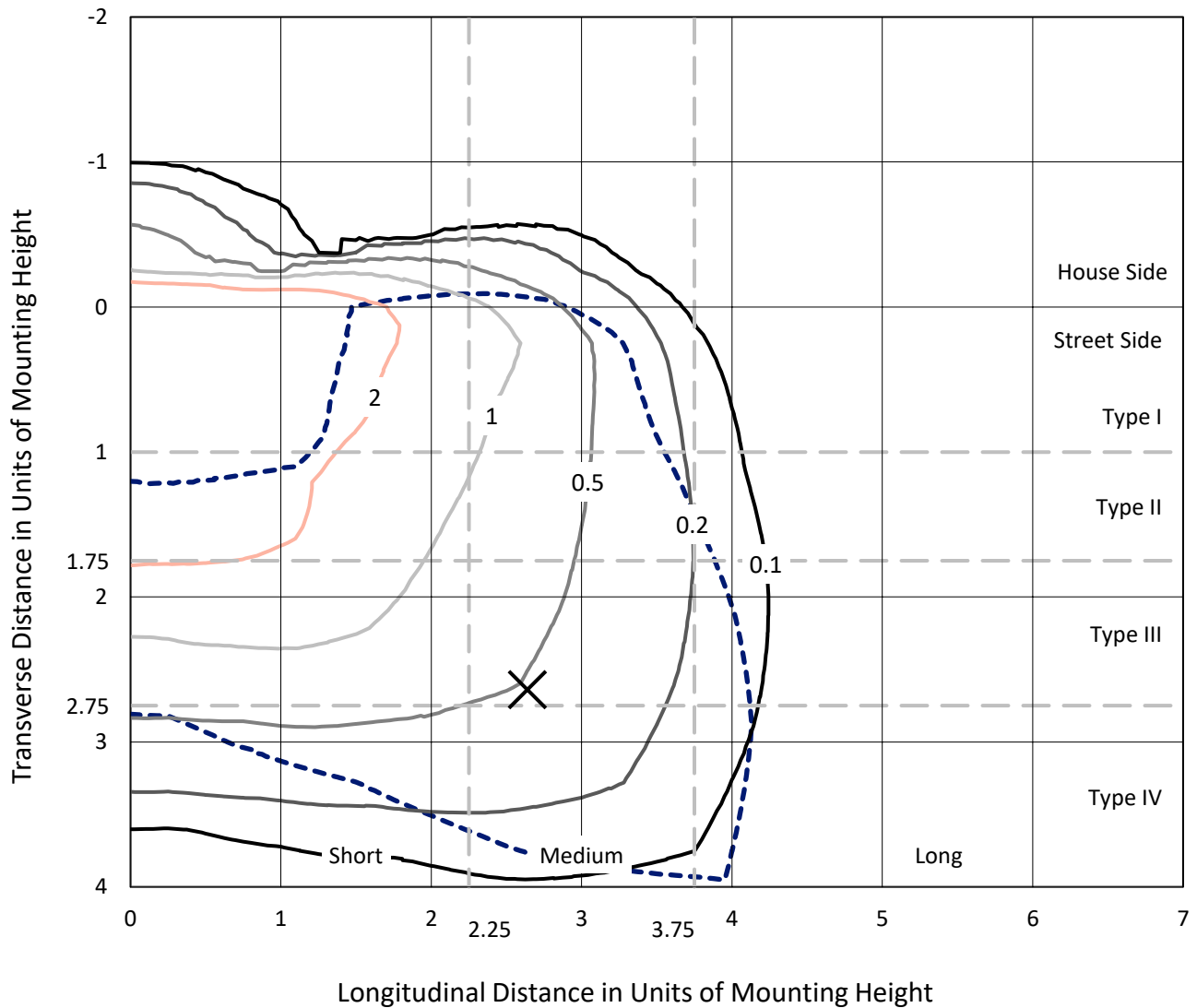
Input Watts (W): 273
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P237480
 CATALOG NUMBER: ARCH-L-AF72-270-D-U-T4W-7050-HSS

Iso-Footcandle Lines of Horizontal Illumination

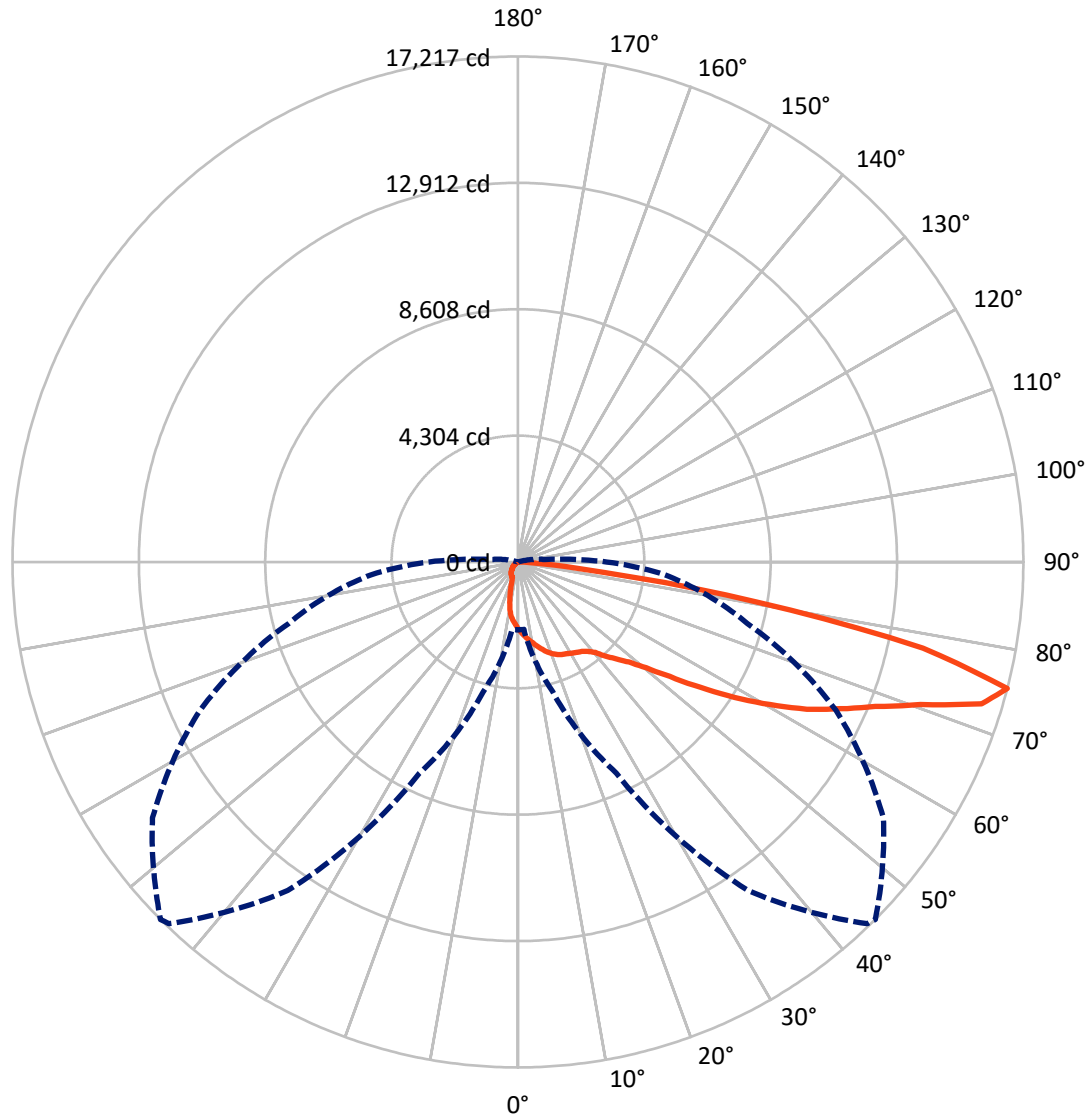
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type IV - Medium - N/A

REPORT NUMBER: P237480
CATALOG NUMBER: ARCH-L-AF72-270-D-U-T4W-7050-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P237480
 CATALOG NUMBER: ARCH-L-AF72-270-D-U-T4W-7050-HSS

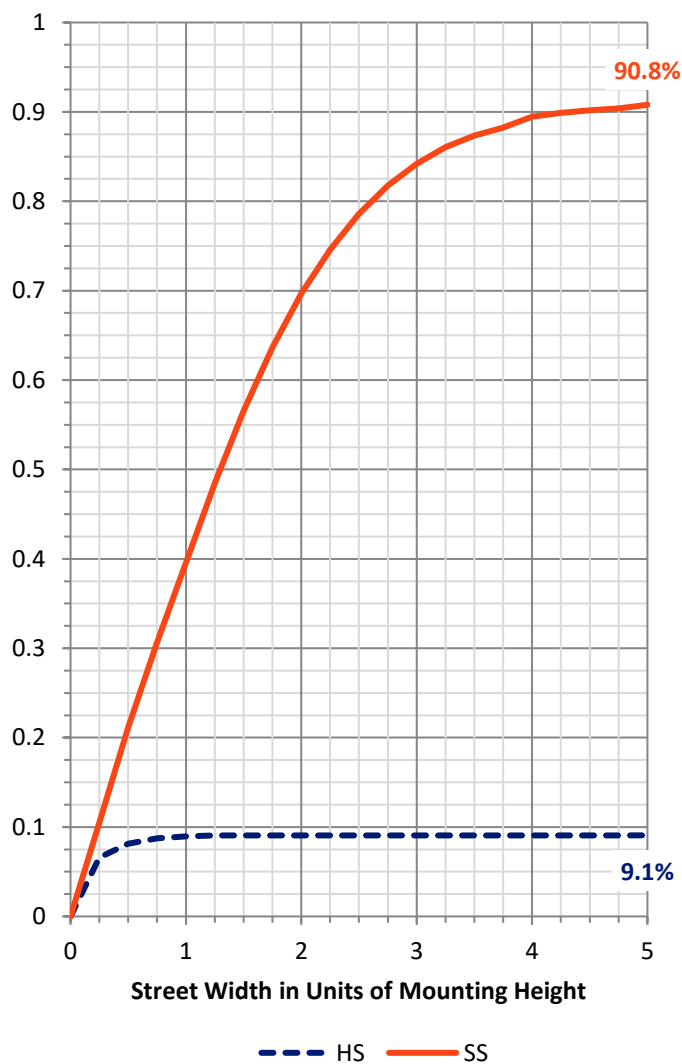
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1958.6	0.0	1958.6
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	19453.5	0.0	19453.5
	% Fixture	90.9	0.0	90.9
Total	Lumens	21412.0	0.0	21412.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.1	1.0
10°-20°	612.3	2.9
20°-30°	1014.1	4.7
30°-40°	1467.6	6.9
40°-50°	2403.2	11.2
50°-60°	4282.0	20.0
60°-70°	6295.0	29.4
70°-80°	4749.0	22.2
80°-90°	372.6	1.7
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°	21412.0	100.0
0°-180°	21412.0	100.0

Coefficient of Utilization



REPORT NUMBER: P237480

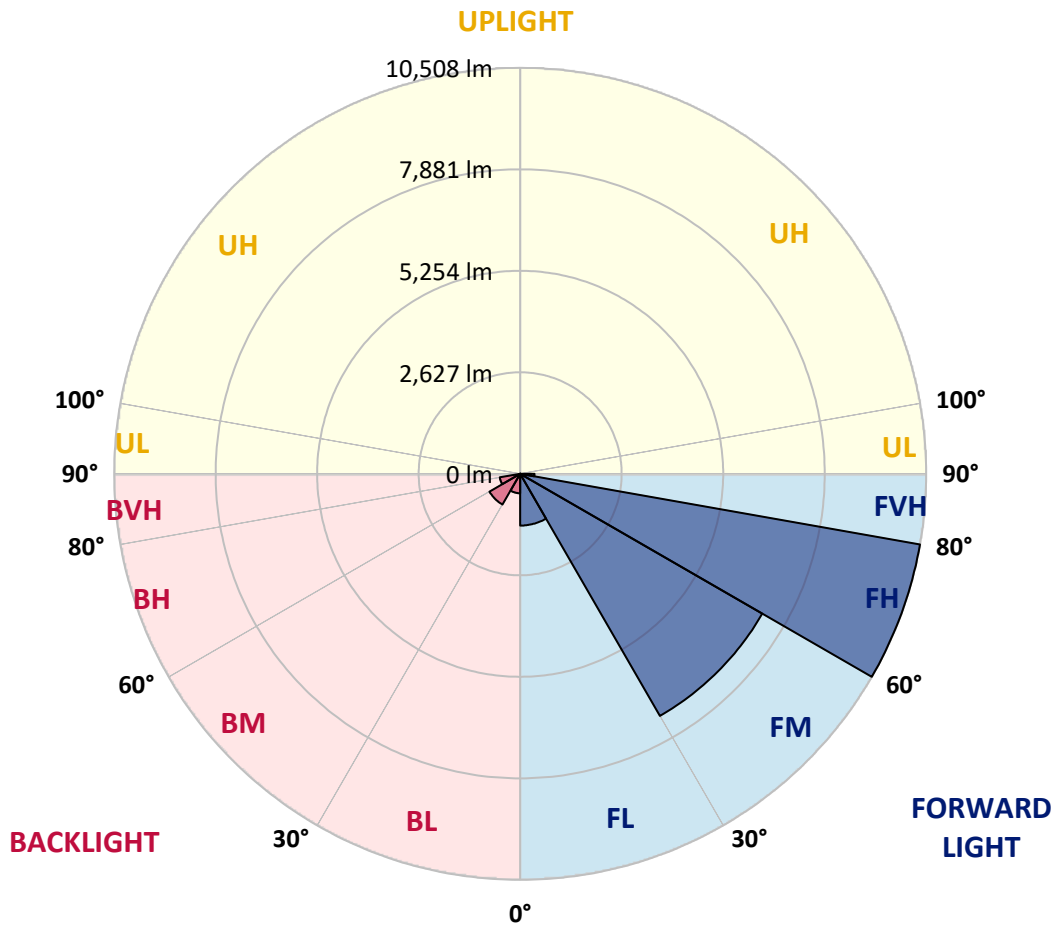
CATALOG NUMBER: ARCH-L-AF72-270-D-U-T4W-7050-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1339.3	6.3			
FM (30°-60°)	7235.0	33.8			
FH (60°-80°)	10507.6	49.1			G4/12000
FVH (80°-90°)	371.5	1.7			G3/500
BL (0°-30°)	503.3	2.4	B2/1000		
BM (30°-60°)	917.8	4.3	B1/1000		
BH (60°-80°)	536.4	2.5	B2/1000		G2/1000
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: B2-U0-G4

Type IV Medium





REPORT NUMBER: P237480

CATALOG NUMBER: ARCH-L-AF72-270-D-U-T4W-7050-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2290.1	2290.1	2290.1	2290.1	2290.1	2290.1	2290.1	2290.1	2290.1	2290.1	2290.1
2.5°	2487.7	2487.7	2482.7	2477.6	2452.3	2426.9	2421.9	2406.7	2361.1	2330.7	2300.3
5°	2695.5	2700.5	2690.4	2665.1	2609.3	2553.6	2548.5	2508.0	2421.9	2361.1	2295.2
7.5°	2893.1	2903.2	2877.9	2832.3	2766.4	2685.3	2680.3	2604.3	2492.8	2406.7	2310.4
10°	3060.3	3060.3	3024.8	2969.1	2898.1	2812.0	2801.9	2715.7	2589.1	2482.7	2356.0
12.5°	3242.7	3237.6	3186.9	3110.9	3029.9	2948.8	2943.7	2837.3	2715.7	2578.9	2421.9
15°	3409.9	3399.7	3333.9	3262.9	3176.8	3090.7	3085.6	2979.2	2852.5	2690.4	2518.1
17.5°	3501.1	3496.0	3435.2	3364.3	3293.3	3227.5	3222.4	3110.9	2974.1	2806.9	2614.4
20°	3516.3	3521.3	3470.7	3409.9	3369.3	3333.9	3333.9	3232.5	3085.6	2908.3	2715.7
22.5°	3521.3	3536.5	3501.1	3420.0	3409.9	3414.9	3425.1	3344.0	3192.0	3024.8	2822.1
25°	3556.8	3577.1	3551.7	3455.5	3445.3	3480.8	3490.9	3455.5	3318.7	3151.5	2943.7
27.5°	3627.7	3648.0	3627.7	3506.1	3490.9	3526.4	3536.5	3556.8	3455.5	3273.1	3070.4
30°	3769.6	3774.7	3729.1	3577.1	3546.7	3592.3	3607.5	3663.2	3582.1	3389.6	3192.0
32.5°	4017.9	3967.2	3830.4	3627.7	3602.4	3653.1	3668.3	3729.1	3698.7	3501.1	3318.7
35°	4524.5	4261.1	3946.9	3698.7	3673.3	3724.0	3744.3	3830.4	3845.6	3658.1	3475.7
37.5°	4519.5	4281.3	4220.5	3835.5	3800.0	3835.5	3860.8	3967.2	4028.0	3865.9	3703.7
40°	4838.7	4737.3	4737.3	4093.9	3977.3	4028.0	4053.3	4159.7	4266.1	4139.5	3972.3
42.5°	5841.9	5776.0	5705.1	4590.4	4225.6	4367.5	4382.7	4448.5	4575.2	4534.7	4337.1
45°	6961.6	6900.8	6627.2	5431.5	4651.2	4676.5	4712.0	4818.4	5000.8	5076.8	4843.7
47.5°	7838.1	7777.3	7544.3	6444.8	5314.9	5092.0	5092.0	5299.7	5583.5	5776.0	5553.1
50°	8542.4	8471.5	8329.6	7524.0	6404.3	5689.9	5659.5	5902.7	6323.2	6622.1	6470.1
52.5°	9226.4	9018.7	8932.5	8638.7	7635.5	6556.3	6475.2	6647.5	7230.1	7600.0	7473.3
55°	9682.4	9652.0	9560.8	9662.1	8927.5	7610.1	7539.2	7574.7	8304.3	8552.5	8395.5
57.5°	10108.0	10102.9	10305.6	10776.8	10336.0	8816.0	8704.5	8648.8	9342.9	9282.1	9418.9
60°	10634.9	10543.7	11014.9	11688.8	11628.0	9991.4	9864.8	9753.3	10138.4	9966.1	10645.0
62.5°	10660.2	10634.9	11592.5	12560.2	12909.8	11187.2	11040.2	10640.0	10832.5	10634.9	11815.4
65°	9692.5	9819.2	11835.7	13021.3	13984.0	12236.0	12058.6	11435.4	11450.6	11318.9	13193.6
67.5°	9474.7	9540.5	11166.9	13517.8	14759.2	13294.9	13127.7	12352.5	12170.1	12180.2	14009.3
70°	8932.5	9033.9	10336.0	13482.4	15372.2	14708.5	14541.3	13700.2	13259.4	12768.0	13381.0
72.5°	6824.8	6997.1	8709.6	11820.5	15205.0	16557.8	16512.2	15407.7	13695.2	11724.2	10123.2
75°	2310.4	2305.3	4575.2	7939.5	13659.7	17125.3	17216.5	15194.9	11947.2	8086.4	5026.1
77.5°	496.5	501.6	942.4	3217.3	9074.4	13750.9	14100.5	11460.8	7706.4	3602.4	1150.1
80°	243.2	248.3	390.1	851.2	3627.7	7711.5	8258.7	5892.5	2847.5	719.5	192.5
82.5°	121.6	126.7	202.7	450.9	1342.7	2741.1	2928.5	2168.5	815.7	405.3	96.3
85°	45.6	45.6	101.3	268.5	613.1	643.5	790.4	628.3	491.5	329.3	25.3
87.5°	10.1	10.1	55.7	131.7	273.6	202.7	202.7	192.5	298.9	222.9	10.1
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: P237480

CATALOG NUMBER: ARCH-L-AF72-270-D-U-T4W-7050-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2290.1	2290.1	2290.1	2290.1	2290.1	2290.1	2290.1	2290.1	2290.1	2290.1	2290.1
2.5°	2285.1	2264.8	2229.3	2193.9	2168.5	2138.1	2122.9	2107.7	2102.7	2097.6	2107.7
5°	2259.7	2229.3	2163.5	2107.7	2057.1	2016.5	1986.1	1955.7	1940.5	1930.4	1935.5
7.5°	2259.7	2214.1	2117.9	2031.7	1950.7	1864.5	1778.4	1712.5	1661.9	1631.5	1636.5
10°	2285.1	2224.3	2097.6	1981.1	1829.1	1646.7	1459.2	1317.3	1221.1	1165.3	1165.3
12.5°	2340.8	2259.7	2102.7	1920.3	1661.9	1342.7	1058.9	886.7	815.7	775.2	780.3
15°	2416.8	2320.5	2128.0	1839.2	1428.8	998.1	739.7	628.3	628.3	638.4	643.5
17.5°	2502.9	2396.5	2148.3	1717.6	1129.9	714.4	582.7	572.5	587.7	613.1	613.1
20°	2589.1	2472.5	2158.4	1525.1	846.1	567.5	552.3	552.3	562.4	587.7	592.8
22.5°	2695.5	2568.8	2148.3	1286.9	633.3	537.1	532.0	532.0	532.0	562.4	562.4
25°	2806.9	2680.3	2107.7	1033.6	537.1	516.8	511.7	506.7	506.7	532.0	537.1
27.5°	2933.6	2796.8	2011.5	790.4	506.7	496.5	491.5	481.3	481.3	501.6	501.6
30°	3060.3	2928.5	1864.5	597.9	481.3	476.3	466.1	456.0	445.9	466.1	466.1
32.5°	3197.1	3065.3	1672.0	476.3	445.9	445.9	440.8	425.6	415.5	425.6	430.7
35°	3379.5	3222.4	1454.1	415.5	400.3	400.3	400.3	395.2	374.9	385.1	385.1
37.5°	3622.7	3440.3	1200.8	385.1	364.8	354.7	354.7	354.7	339.5	344.5	344.5
40°	3931.7	3693.6	957.6	359.7	339.5	314.1	304.0	309.1	298.9	298.9	293.9
42.5°	4352.3	3967.2	719.5	339.5	319.2	283.7	263.5	258.4	248.3	243.2	243.2
45°	4955.2	4301.6	516.8	319.2	304.0	248.3	228.0	212.8	187.5	172.3	172.3
47.5°	5735.5	4681.6	385.1	298.9	288.8	217.9	192.5	162.1	126.7	116.5	116.5
50°	6688.0	5107.2	324.3	268.5	263.5	192.5	152.0	106.4	70.9	60.8	65.9
52.5°	7615.2	5507.5	288.8	238.1	233.1	167.2	111.5	55.7	30.4	30.4	30.4
55°	8395.5	5791.2	263.5	212.8	202.7	131.7	60.8	25.3	15.2	15.2	15.2
57.5°	9099.7	5953.3	238.1	187.5	162.1	91.2	25.3	10.1	10.1	5.1	5.1
60°	9743.2	6049.6	207.7	162.1	126.7	50.7	10.1	5.1	5.1	0.0	0.0
62.5°	10376.5	6120.5	177.3	131.7	96.3	20.3	5.1	5.1	0.0	0.0	0.0
65°	10857.8	6095.2	141.9	106.4	60.8	10.1	5.1	0.0	0.0	0.0	0.0
67.5°	10842.6	5750.7	106.4	81.1	30.4	5.1	0.0	0.0	0.0	0.0	0.0
70°	9697.6	4843.7	70.9	50.7	10.1	5.1	0.0	0.0	0.0	0.0	0.0
72.5°	6880.5	3105.9	45.6	30.4	5.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	3029.9	942.4	25.3	15.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	592.8	217.9	15.2	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	141.9	25.3	5.1	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	60.8	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.2	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.1	5.1	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)