

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: P237201

Luminaire Tested: **ARCH-L-AF72-280-D-U-T3-7030-HSS**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237201  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-280-D-U-T3-7030-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21288.1 lumens  
Efficiency: N/A  
Efficacy: 76.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G4

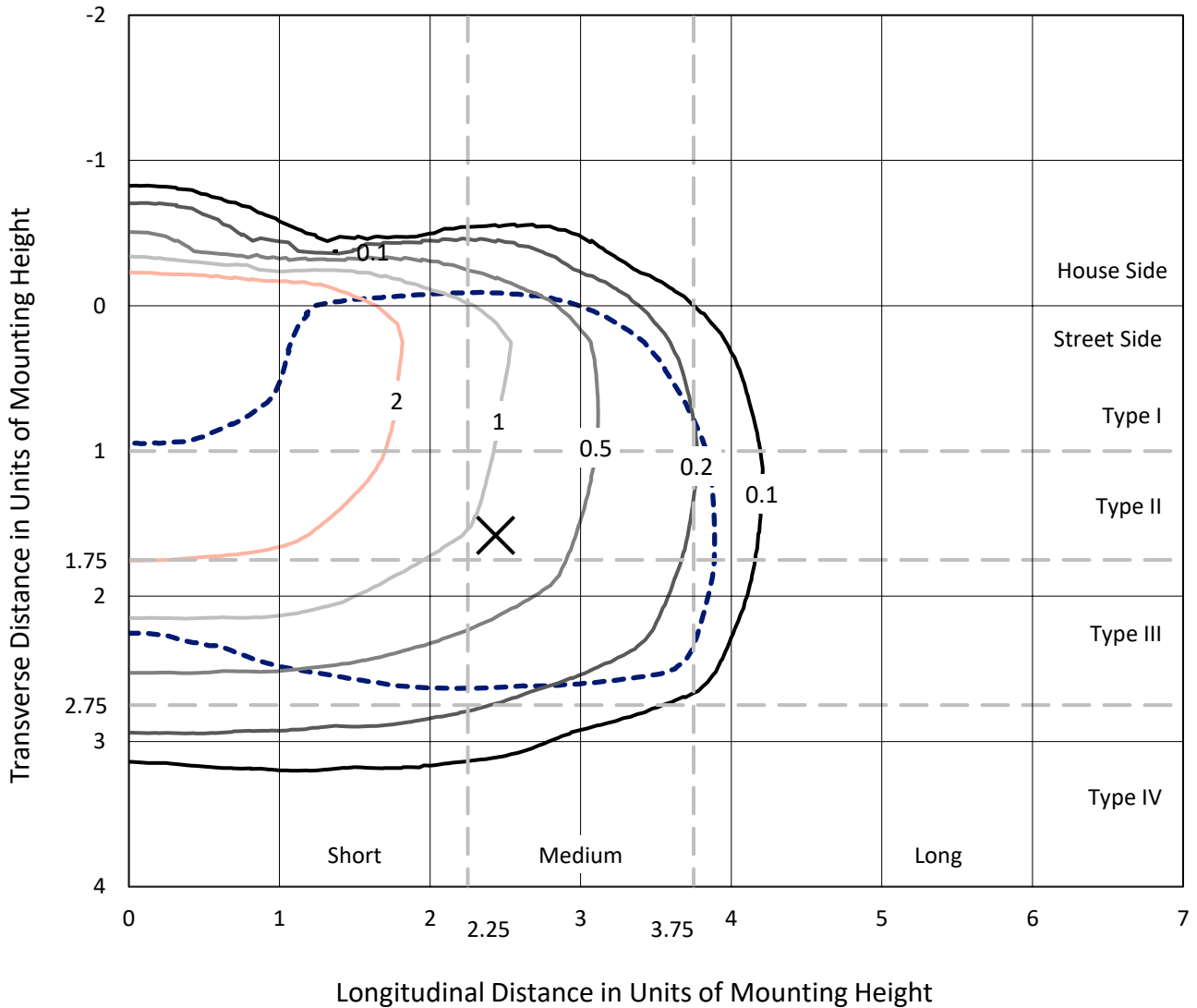
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P237201  
 CATALOG NUMBER: ARCH-L-AF72-280-D-U-T3-7030-HSS

### Iso-Footcandle Lines of Horizontal Illumination

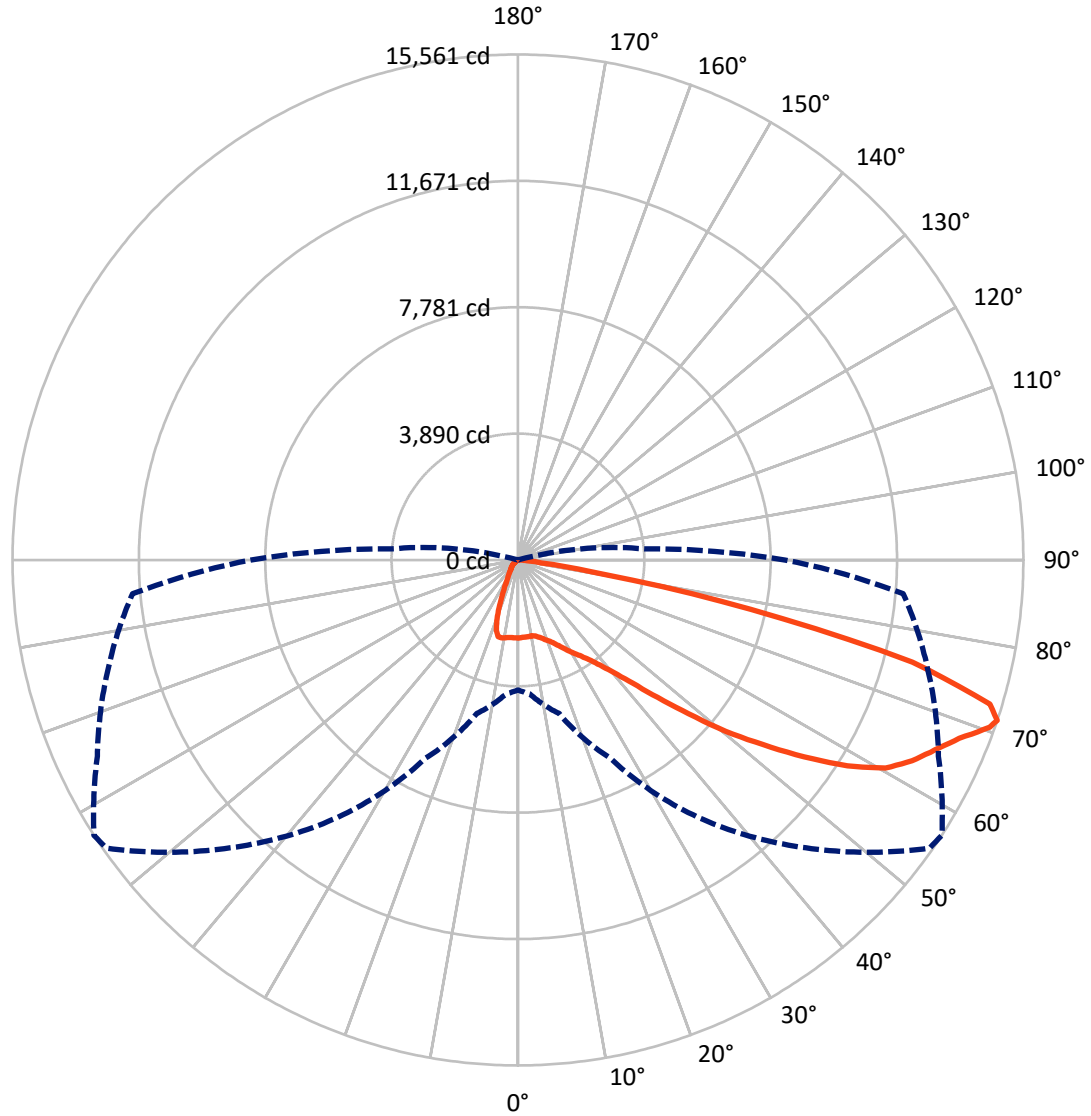
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc  
 Type III - Medium - N/A

REPORT NUMBER: P237201  
CATALOG NUMBER: ARCH-L-AF72-280-D-U-T3-7030-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

REPORT NUMBER: P237201

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T3-7030-HSS

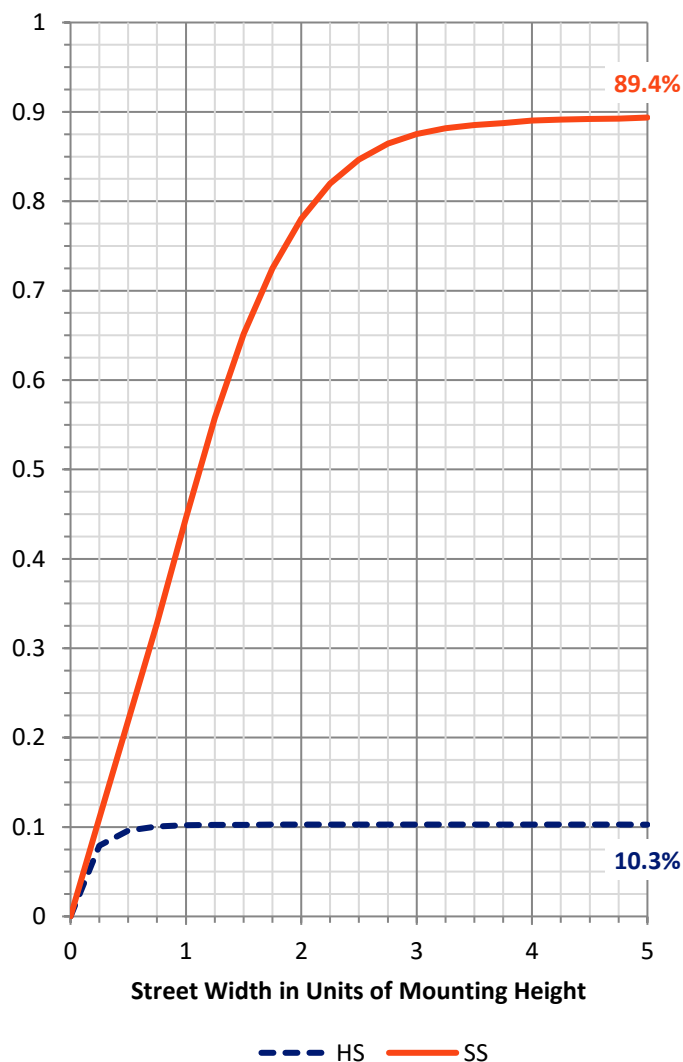
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2206.1	0.0	2206.1
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	19082.0	0.0	19082.0
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	21288.1	0.0	21288.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	225.9	1.1
10°-20°	604.1	2.8
20°-30°	942.4	4.4
30°-40°	1592.8	7.5
40°-50°	3093.7	14.5
50°-60°	5195.3	24.4
60°-70°	6200.1	29.1
70°-80°	3267.5	15.3
80°-90°	166.0	0.8
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°	21288.1	100.0
0°-180°	21288.1	100.0

**Coefficient of Utilization**



REPORT NUMBER: P237201

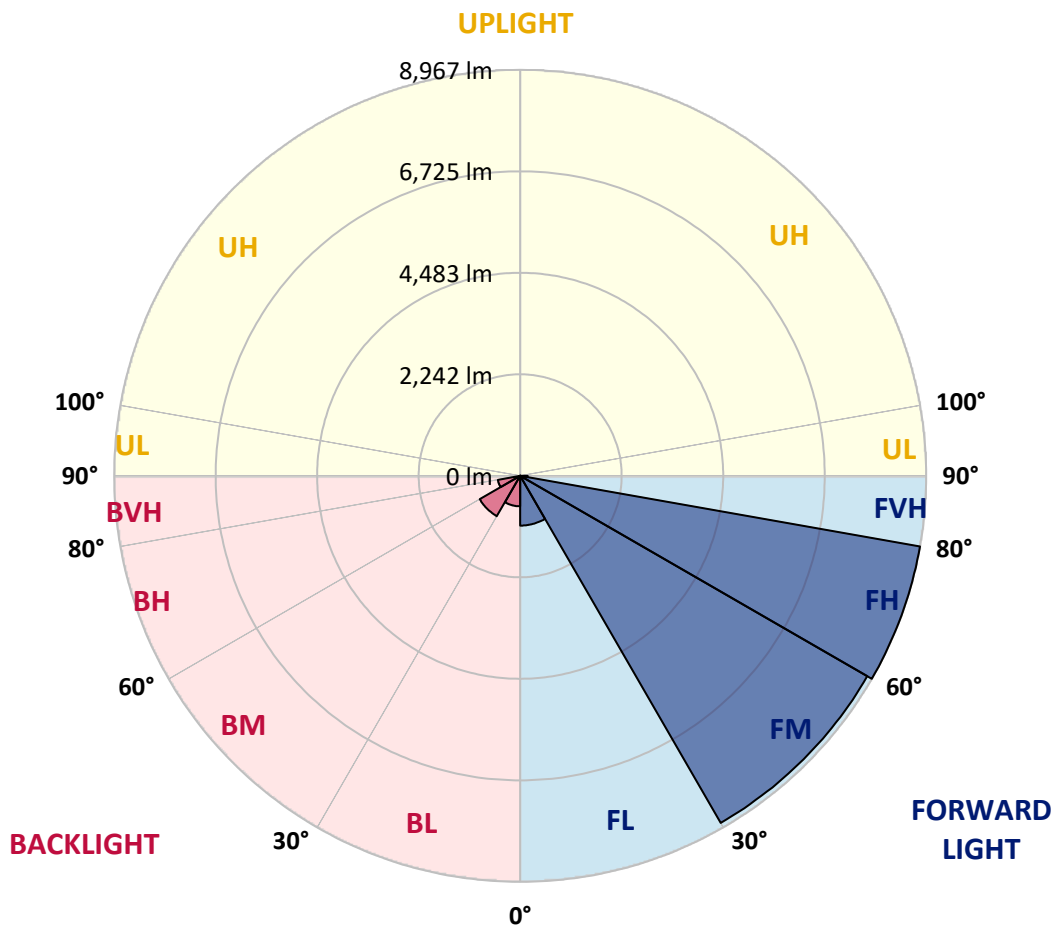
CATALOG NUMBER: ARCH-L-AF72-280-D-U-T3-7030-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1099.1	5.2			
FM (30°-60°)	8851.8	41.6			
FH (60°-80°)	8966.7	42.1			G4/12000
FVH (80°-90°)	164.5	0.8			G2/225
BL (0°-30°)	673.4	3.2	B2/1000		
BM (30°-60°)	1030.1	4.8	B2/2500		
BH (60°-80°)	501.0	2.4	B2/1000		G2/1000
BVH (80°-90°)	1.6	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-G4**

Type III Medium





REPORT NUMBER: P237201

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T3-7030-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2405.9	2405.9	2405.9	2405.9	2405.9	2405.9	2405.9	2405.9	2405.9	2405.9	2405.9
2.5°	2371.2	2371.2	2371.2	2376.1	2381.1	2381.1	2391.0	2386.0	2386.0	2386.0	2395.9
5°	2306.7	2311.6	2316.7	2326.4	2346.4	2361.2	2386.0	2386.0	2391.0	2400.9	2405.9
7.5°	2217.4	2222.4	2237.2	2257.1	2296.7	2331.5	2371.2	2381.1	2395.9	2420.7	2430.7
10°	2162.8	2172.7	2192.7	2217.4	2262.0	2306.7	2356.2	2371.2	2415.8	2460.4	2485.2
12.5°	2147.9	2152.9	2172.7	2212.4	2267.0	2321.5	2386.0	2400.9	2465.4	2534.9	2574.5
15°	2172.7	2177.6	2187.6	2232.2	2296.7	2366.2	2450.4	2470.4	2549.8	2629.1	2678.7
17.5°	2217.4	2217.4	2227.2	2267.0	2336.4	2415.8	2525.0	2554.7	2644.0	2733.2	2787.9
20°	2247.1	2247.1	2262.0	2301.6	2381.1	2485.2	2614.2	2653.9	2753.2	2852.3	2901.9
22.5°	2276.9	2281.9	2296.7	2341.4	2430.7	2574.5	2723.4	2763.0	2877.2	2981.2	3031.0
25°	2361.2	2356.2	2361.2	2400.9	2505.1	2683.6	2872.2	2921.8	3040.8	3155.0	3179.8
27.5°	2594.4	2584.4	2519.9	2495.2	2574.5	2797.8	3060.7	3110.3	3249.2	3363.2	3363.2
30°	3130.2	3110.3	2951.5	2748.2	2683.6	2901.9	3239.2	3308.7	3487.2	3586.6	3556.7
32.5°	3809.8	3765.1	3561.7	3214.4	2956.4	3040.8	3427.8	3507.1	3735.3	3819.6	3755.1
35°	4553.8	4548.8	4295.8	3849.4	3482.3	3328.6	3670.8	3765.1	4052.8	4127.2	4023.0
37.5°	5342.6	5362.3	5193.7	4578.6	4147.1	3799.8	3993.2	4102.3	4454.6	4543.9	4444.6
40°	6220.5	6215.5	6151.1	5421.9	4945.7	4469.5	4459.5	4558.8	4985.4	5124.3	4985.4
42.5°	7331.8	7321.8	7088.6	6433.8	5913.0	5342.6	5139.1	5173.9	5650.2	5878.2	5674.9
45°	8462.6	8393.3	8125.4	7559.8	7098.6	6423.9	6037.0	6037.0	6443.8	6756.3	6438.8
47.5°	9092.8	9023.2	8914.1	8601.7	8462.6	7708.7	7138.2	7068.8	7386.3	7703.8	7257.3
50°	9921.2	9921.2	9648.3	9529.3	9767.3	9236.6	8353.6	8284.1	8437.9	8690.9	8105.6
52.5°	10576.0	10456.8	10263.4	10367.6	11047.2	10804.1	9568.9	9435.0	9554.0	9618.5	8844.6
55°	10848.8	10734.7	10719.8	11101.8	12153.4	11816.1	10814.1	10695.0	10685.0	10367.6	9489.6
57.5°	10903.3	10804.1	10992.6	11662.4	13229.8	12644.5	12054.1	11964.9	11687.1	10893.3	10149.3
60°	10442.0	10491.6	10948.0	11969.9	13864.8	13363.7	13100.8	13006.7	12366.7	11339.9	10883.6
62.5°	9494.5	9613.6	10466.8	11999.6	13631.6	13656.5	13681.2	13616.8	12892.5	11746.6	11622.6
65°	8373.4	8408.1	9435.0	11587.9	13224.8	13567.2	14107.9	14102.8	13294.3	12202.9	12456.0
67.5°	6900.2	6959.7	7847.6	10199.0	12411.3	13527.5	14668.4	14653.6	13750.8	12723.9	12952.0
70°	5134.2	5208.6	5927.9	7931.9	10595.8	13031.5	15402.6	15412.4	14231.9	13120.7	12609.7
71°	4003.2	4137.1	4891.1	6736.5	9668.2	12530.4	15471.9	15561.2	14286.4	13066.1	11905.3
72.5°	1964.4	2123.1	3070.6	4742.3	7956.7	11409.3	15015.6	15189.2	13944.1	12386.5	10179.0
75°	510.9	540.8	917.7	1939.6	4266.1	7559.8	12108.7	12550.3	11399.3	9430.0	6220.5
77.5°	322.5	332.3	431.6	754.0	1597.3	2872.2	7113.5	7331.8	6513.3	4777.1	2192.7
80°	228.2	233.2	272.8	486.1	932.6	838.3	2559.6	2653.9	2356.2	1264.9	391.9
82.5°	138.9	138.9	198.5	312.5	575.5	456.3	674.6	719.3	634.9	352.3	128.9
85°	79.3	84.3	124.0	213.3	272.8	223.2	252.9	267.9	272.8	233.2	54.5
87.5°	64.5	69.5	109.2	178.5	148.8	109.2	109.2	114.0	119.1	138.9	24.8
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: P237201

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T3-7030-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2405.9	2405.9	2405.9	2405.9	2405.9	2405.9	2405.9	2405.9	2405.9	2405.9	2405.9
2.5°	2395.9	2395.9	2400.9	2395.9	2395.9	2395.9	2400.9	2400.9	2400.9	2410.8	2415.8
5°	2405.9	2405.9	2405.9	2400.9	2395.9	2395.9	2405.9	2410.8	2410.8	2425.7	2425.7
7.5°	2430.7	2430.7	2420.7	2410.8	2400.9	2386.0	2391.0	2395.9	2391.0	2395.9	2395.9
10°	2485.2	2485.2	2470.4	2450.4	2420.7	2376.1	2316.7	2242.2	2172.7	2147.9	2137.9
12.5°	2574.5	2569.6	2539.8	2505.1	2440.7	2286.8	2063.6	1800.7	1582.4	1522.8	1503.1
15°	2673.8	2663.8	2629.1	2569.6	2395.9	1989.2	1522.8	1185.6	977.3	927.6	917.7
17.5°	2777.9	2763.0	2713.5	2594.4	2192.7	1478.3	982.2	744.0	630.0	620.0	625.1
20°	2887.0	2867.2	2797.8	2544.7	1770.9	987.1	634.9	575.5	565.5	565.5	570.5
22.5°	3011.0	2986.3	2892.0	2366.2	1289.7	654.8	545.6	540.8	535.7	530.8	530.8
25°	3155.0	3125.2	2981.2	2043.8	888.0	535.7	520.8	506.0	496.0	486.1	481.2
27.5°	3328.6	3288.8	3050.7	1646.9	610.1	501.1	491.1	466.3	446.5	426.6	426.6
30°	3502.2	3452.6	3031.0	1240.1	496.0	466.3	446.5	416.8	386.9	367.1	362.0
32.5°	3685.8	3636.1	2901.9	833.4	451.5	426.6	401.8	357.2	322.5	297.6	292.7
35°	3958.6	3918.8	2649.0	550.6	406.8	377.1	342.3	297.6	252.9	228.2	223.2
37.5°	4365.4	4315.7	2336.4	421.6	357.2	312.5	282.8	233.2	188.5	163.7	158.8
40°	4910.9	4762.2	1964.4	372.0	312.5	258.0	218.3	168.7	134.0	119.1	119.1
42.5°	5545.9	5193.7	1562.6	337.3	277.8	213.3	158.8	114.0	94.3	89.3	89.3
45°	6220.5	5595.5	1160.8	312.5	243.1	168.7	114.0	79.3	69.5	64.5	64.5
47.5°	6915.0	5923.0	808.5	282.8	203.3	128.9	79.3	59.5	49.6	44.7	44.7
50°	7564.9	6136.2	570.5	252.9	173.6	94.3	59.5	44.7	34.8	34.8	34.8
52.5°	8016.3	6116.4	411.7	218.3	134.0	64.5	39.7	29.7	29.7	29.7	29.7
55°	8413.1	6041.9	322.5	188.5	104.2	44.7	29.7	24.8	24.8	19.8	19.8
57.5°	8750.5	5923.0	272.8	153.7	74.4	34.8	19.8	19.8	14.9	14.9	14.9
60°	9038.2	5774.2	228.2	128.9	49.6	24.8	14.9	10.0	10.0	4.9	10.0
62.5°	9430.0	5679.9	198.5	99.2	34.8	14.9	10.0	4.9	4.9	0.0	0.0
65°	9717.7	5501.3	168.7	69.5	19.8	10.0	4.9	4.9	0.0	0.0	0.0
67.5°	9727.7	5178.8	124.0	39.7	14.9	10.0	4.9	0.0	0.0	0.0	0.0
70°	8943.9	4414.9	79.3	19.8	10.0	4.9	4.9	0.0	0.0	0.0	0.0
71°	8224.6	3909.0	64.5	14.9	10.0	4.9	0.0	0.0	0.0	0.0	0.0
72.5°	6776.2	2872.2	49.6	14.9	4.9	4.9	0.0	0.0	0.0	0.0	0.0
75°	3735.3	1041.7	24.8	10.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1195.6	317.5	14.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	203.3	49.6	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	69.5	19.8	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	19.8	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.0	4.9	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)