

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: P237457

Luminaire Tested: **ARCH-L-AF72-240-D-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237457
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-240-D-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1030mA 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: 20357.7 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G4

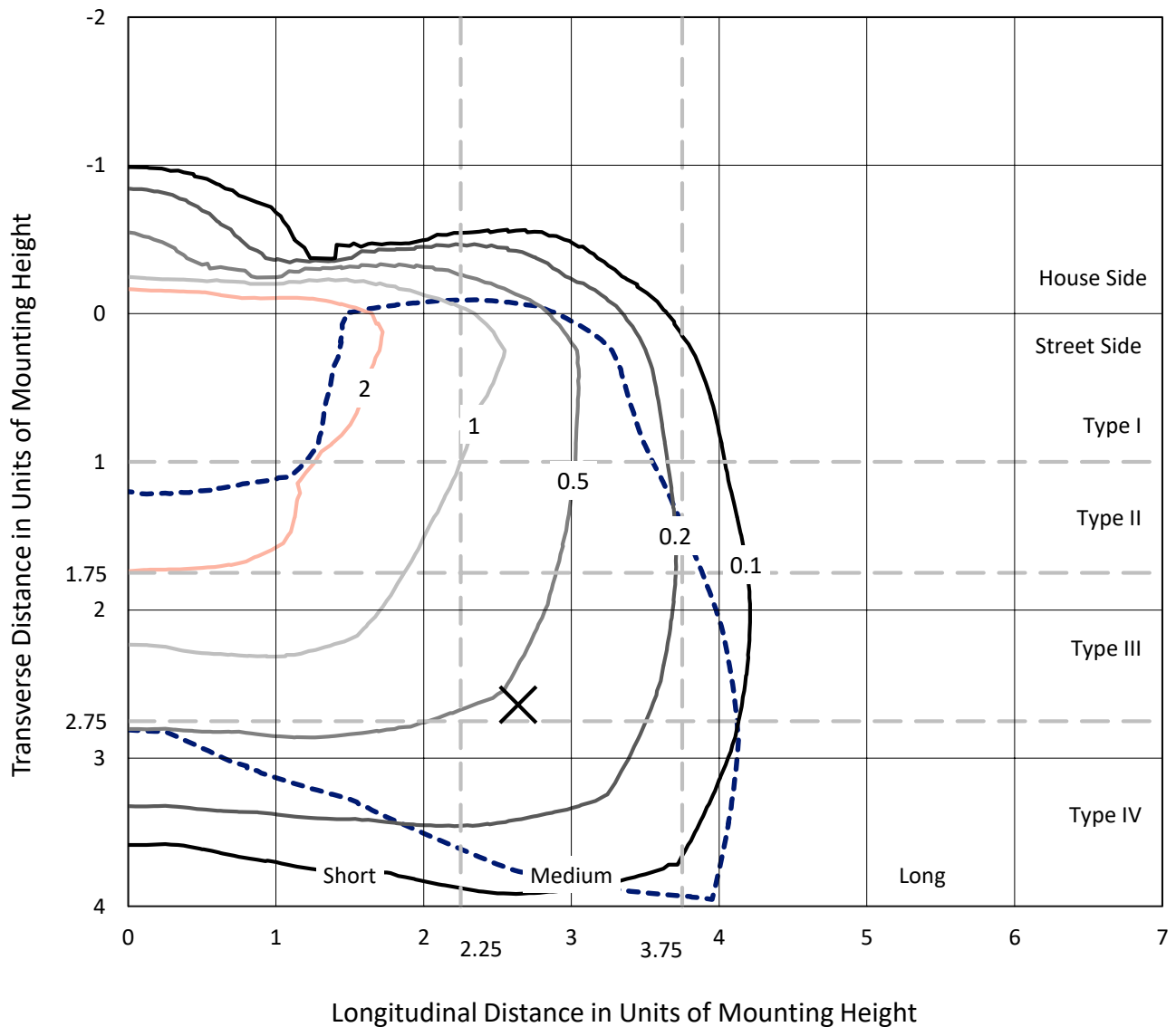
Input Watts (W): 242
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P237457
 CATALOG NUMBER: ARCH-L-AF72-240-D-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

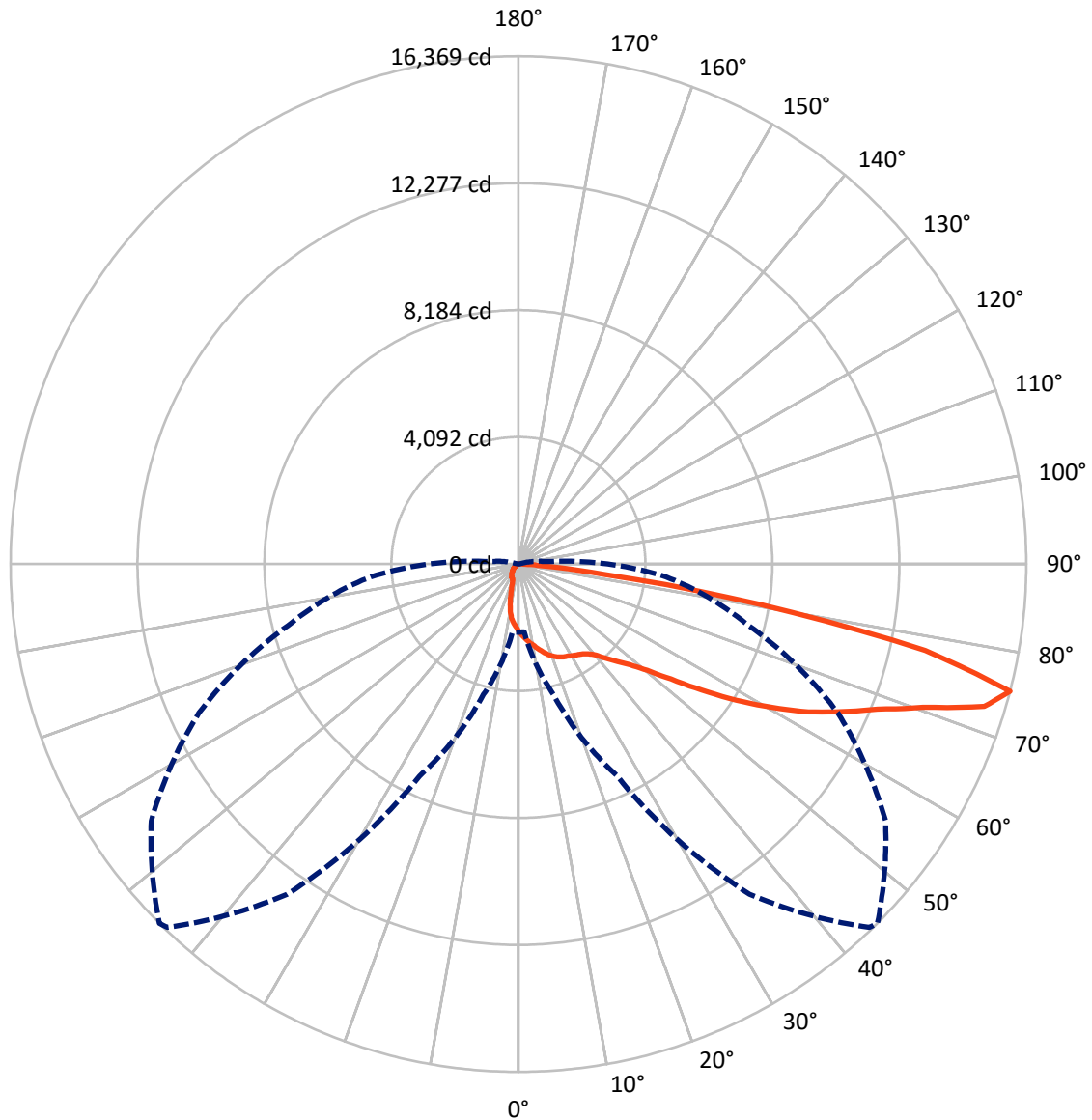
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P237457
CATALOG NUMBER: ARCH-L-AF72-240-D-U-T4W-HSS

Luminous Intensity Polar Plot



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



REPORT NUMBER: P237457

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T4W-HSS

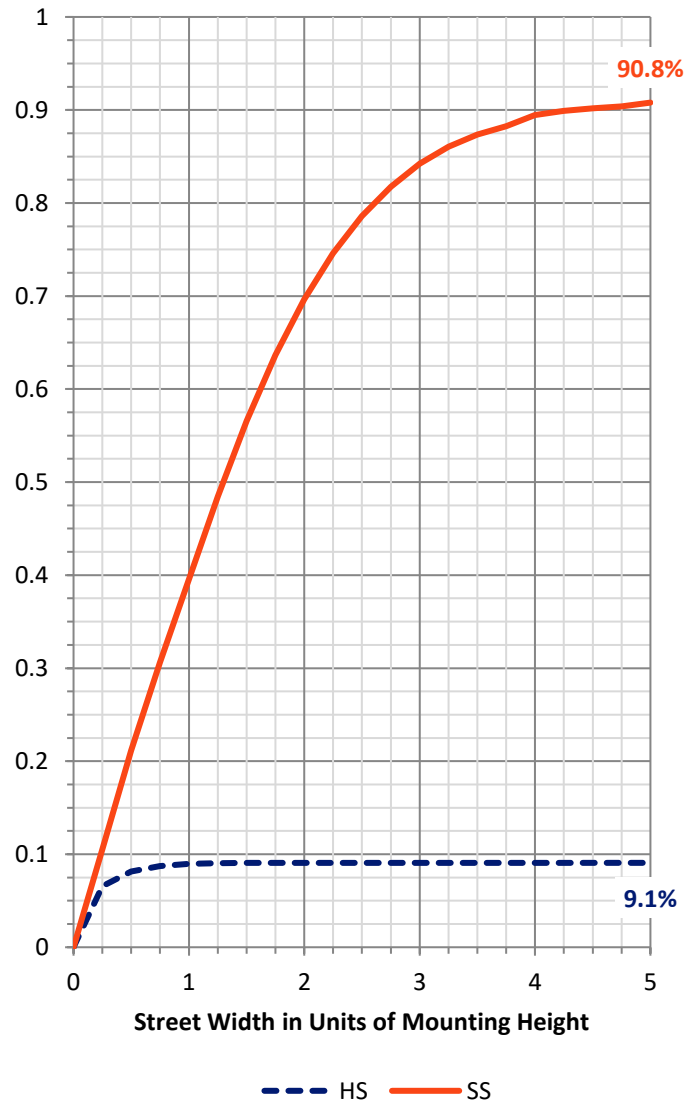
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1862.1	0.0	1862.1
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	18495.6	0.0	18495.6
	% Fixture	90.9	0.0	90.9
Total	Lumens	20357.7	0.0	20357.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.5	1.0
10°-20°	582.2	2.9
20°-30°	964.2	4.7
30°-40°	1395.4	6.9
40°-50°	2284.9	11.2
50°-60°	4071.1	20.0
60°-70°	5985.1	29.4
70°-80°	4515.2	22.2
80°-90°	354.2	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°	20357.7	100.0
0°-180°	20357.7	100.0

Coefficient of Utilization



REPORT NUMBER: P237457

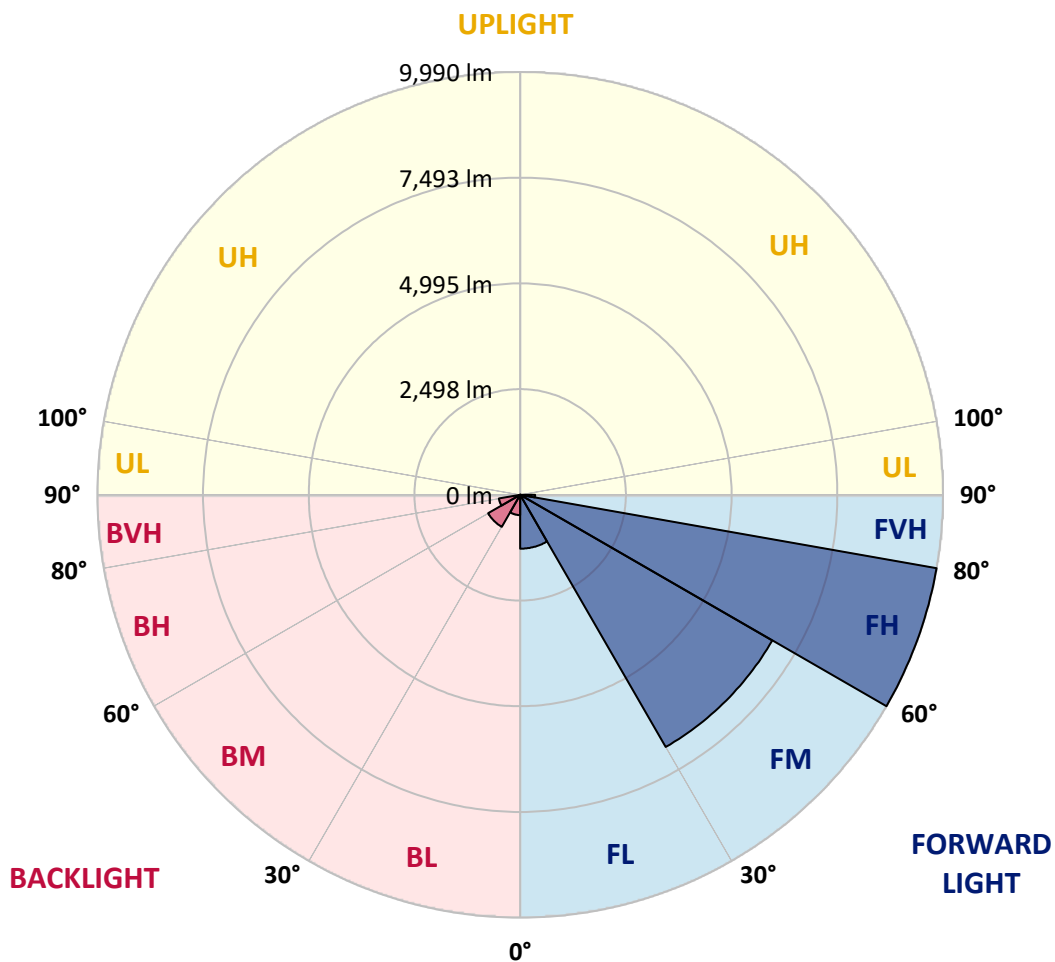
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1273.3	6.3			
FM	(30°-60°)	6878.8	33.8			
FH	(60°-80°)	9990.3	49.1			G4/12000
FVH	(80°-90°)	353.3	1.7			G3/500
BL	(0°-30°)	478.5	2.4	B1/500		
BM	(30°-60°)	872.6	4.3	B1/1000		
BH	(60°-80°)	510.0	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: P237457

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4
2.5°	2365.3	2365.3	2360.5	2355.7	2331.5	2307.5	2302.7	2288.1	2244.8	2215.9	2187.0
5°	2562.7	2567.6	2557.9	2533.8	2480.9	2427.9	2423.1	2384.5	2302.7	2244.8	2182.2
7.5°	2750.6	2760.2	2736.2	2692.8	2630.2	2553.1	2548.3	2476.1	2370.1	2288.1	2196.7
10°	2909.6	2909.6	2875.8	2822.8	2755.4	2673.6	2663.9	2582.0	2461.6	2360.5	2240.0
12.5°	3083.0	3078.2	3030.0	2957.8	2880.7	2803.6	2798.8	2697.6	2582.0	2451.9	2302.7
15°	3241.9	3232.3	3169.7	3102.3	3020.4	2938.5	2933.7	2832.6	2712.0	2557.9	2394.1
17.5°	3328.7	3323.9	3266.1	3198.7	3131.2	3068.5	3063.7	2957.8	2827.7	2668.7	2485.7
20°	3343.1	3347.9	3299.7	3241.9	3203.5	3169.7	3169.7	3073.4	2933.7	2765.0	2582.0
22.5°	3347.9	3362.4	3328.7	3251.7	3241.9	3246.7	3256.5	3179.3	3034.8	2875.8	2683.2
25°	3381.7	3400.9	3376.9	3285.3	3275.7	3309.5	3319.1	3285.3	3155.3	2996.3	2798.8
27.5°	3449.1	3468.4	3449.1	3333.5	3319.1	3352.7	3362.4	3381.7	3285.3	3111.9	2919.2
30°	3584.0	3588.8	3545.4	3400.9	3372.1	3415.4	3429.9	3482.8	3405.7	3222.7	3034.8
32.5°	3820.0	3771.8	3641.8	3449.1	3425.0	3473.2	3487.6	3545.4	3516.6	3328.7	3155.3
35°	4301.7	4051.3	3752.6	3516.6	3492.5	3540.6	3559.9	3641.8	3656.2	3478.0	3304.6
37.5°	4296.9	4070.5	4012.7	3646.6	3612.9	3646.6	3670.7	3771.8	3829.6	3675.6	3521.4
40°	4600.4	4504.1	4504.1	3892.3	3781.5	3829.6	3853.8	3954.9	4056.1	3935.6	3776.6
42.5°	5554.2	5491.6	5424.2	4364.4	4017.5	4152.5	4166.9	4229.5	4349.9	4311.4	4123.5
45°	6618.8	6561.0	6300.9	5164.1	4422.2	4446.3	4480.0	4581.2	4754.6	4826.8	4605.2
47.5°	7452.2	7394.4	7172.8	6127.5	5053.3	4841.3	4841.3	5038.7	5308.5	5491.6	5279.7
50°	8121.8	8054.3	7919.5	7153.5	6088.9	5409.7	5380.8	5612.0	6011.9	6296.1	6151.5
52.5°	8772.1	8574.6	8492.7	8213.3	7259.5	6233.5	6156.3	6320.2	6874.1	7225.8	7105.3
55°	9205.6	9176.8	9090.0	9186.4	8487.9	7235.4	7168.0	7201.7	7895.3	8131.4	7982.1
57.5°	9610.3	9605.5	9798.1	10246.2	9827.1	8382.0	8276.0	8223.0	8882.9	8825.1	8955.1
60°	10111.3	10024.6	10472.6	11113.2	11055.4	9499.5	9379.0	9273.0	9639.2	9475.4	10120.9
62.5°	10135.4	10111.3	11021.8	11941.8	12274.2	10636.3	10496.7	10116.1	10299.2	10111.3	11233.7
65°	9215.3	9335.8	11253.0	12380.2	13295.5	11633.5	11464.9	10872.4	10886.9	10761.6	12543.9
67.5°	9008.1	9070.8	10617.1	12852.3	14032.5	12640.3	12481.3	11744.3	11570.9	11580.5	13319.5
70°	8492.7	8589.1	9827.1	12818.6	14615.4	13984.4	13825.4	13025.6	12606.6	12139.4	12722.2
72.5°	6488.8	6652.6	8280.8	11238.5	14456.4	15742.6	15699.2	14649.1	13020.8	11147.0	9624.7
75°	2196.7	2191.8	4349.9	7548.6	12987.2	16282.1	16368.8	14446.7	11358.9	7688.2	4778.6
77.5°	472.1	476.9	896.0	3058.9	8627.6	13073.8	13406.3	10896.5	7327.0	3425.0	1093.5
80°	231.2	236.0	370.9	809.3	3449.1	7331.8	7852.1	5602.4	2707.2	684.0	183.0
82.5°	115.6	120.4	192.7	428.7	1276.5	2606.1	2784.4	2061.8	775.6	385.3	91.6
85°	43.4	43.4	96.4	255.3	582.9	611.8	751.5	597.3	467.3	313.1	24.0
87.5°	9.6	9.6	53.0	125.2	260.1	192.7	192.7	183.0	284.2	212.0	9.6
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: P237457

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4
2.5°	2172.5	2153.3	2119.6	2085.8	2061.8	2032.8	2018.4	2004.0	1999.2	1994.3	2004.0
5°	2148.5	2119.6	2056.9	2004.0	1955.8	1917.2	1888.4	1859.4	1845.0	1835.4	1840.2
7.5°	2148.5	2105.1	2013.6	1931.7	1854.6	1772.8	1690.8	1628.2	1580.0	1551.1	1555.9
10°	2172.5	2114.7	1994.3	1883.6	1739.0	1565.6	1387.3	1252.5	1160.9	1108.0	1108.0
12.5°	2225.5	2148.5	1999.2	1825.8	1580.0	1276.5	1006.8	843.0	775.6	737.0	741.8
15°	2297.8	2206.3	2023.2	1748.6	1358.5	949.0	703.3	597.3	597.3	606.9	611.8
17.5°	2379.7	2278.5	2042.5	1633.0	1074.2	679.2	553.9	544.3	558.8	582.9	582.9
20°	2461.6	2350.7	2052.1	1449.9	804.4	539.5	525.1	525.1	534.7	558.8	563.6
22.5°	2562.7	2442.3	2042.5	1223.6	602.1	510.7	505.8	505.8	505.8	534.7	534.7
25°	2668.7	2548.3	2004.0	982.7	510.7	491.3	486.5	481.7	481.7	505.8	510.7
27.5°	2789.2	2659.1	1912.4	751.5	481.7	472.1	467.3	457.7	457.7	476.9	476.9
30°	2909.6	2784.4	1772.8	568.5	457.7	452.9	443.1	433.5	423.9	443.1	443.1
32.5°	3039.7	2914.4	1589.7	452.9	423.9	423.9	419.1	404.7	395.0	404.7	409.5
35°	3213.1	3063.7	1382.5	395.0	380.5	380.5	380.5	375.7	356.5	366.1	366.1
37.5°	3444.3	3270.9	1141.7	366.1	346.9	337.2	337.2	337.2	322.7	327.5	327.5
40°	3738.2	3511.7	910.4	342.0	322.7	298.7	289.0	293.9	284.2	284.2	279.4
42.5°	4137.9	3771.8	684.0	322.7	303.5	269.8	250.5	245.7	236.0	231.2	231.2
45°	4711.2	4089.8	491.3	303.5	289.0	236.0	216.8	202.3	178.2	163.8	163.8
47.5°	5453.0	4451.1	366.1	284.2	274.6	207.1	183.0	154.2	120.4	110.8	110.8
50°	6358.7	4855.7	308.3	255.3	250.5	183.0	144.5	101.2	67.4	57.8	62.6
52.5°	7240.2	5236.3	274.6	226.4	221.6	159.0	106.0	53.0	28.9	28.9	28.9
55°	7982.1	5506.0	250.5	202.3	192.7	125.2	57.8	24.0	14.4	14.4	14.4
57.5°	8651.7	5660.2	226.4	178.2	154.2	86.7	24.0	9.6	9.6	4.8	4.8
60°	9263.4	5751.7	197.5	154.2	120.4	48.2	9.6	4.8	4.8	0.0	0.0
62.5°	9865.6	5819.2	168.6	125.2	91.6	19.2	4.8	4.8	0.0	0.0	0.0
65°	10323.2	5795.1	134.9	101.2	57.8	9.6	4.8	0.0	0.0	0.0	0.0
67.5°	10308.8	5467.5	101.2	77.0	28.9	4.8	0.0	0.0	0.0	0.0	0.0
70°	9220.1	4605.2	67.4	48.2	9.6	4.8	0.0	0.0	0.0	0.0	0.0
72.5°	6541.8	2953.0	43.4	28.9	4.8	0.0	0.0	0.0	0.0	0.0	0.0
75°	2880.7	896.0	24.0	14.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	563.6	207.1	14.4	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	134.9	24.0	4.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	57.8	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.4	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.6	4.8	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)