

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: P265746

Luminaire Tested: **ARCH-L-AF72-280-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265746
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-280-D-U-T2U-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 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: 18095.6 lumens
Efficiency: N/A
Efficacy: 64.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

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: 28.75 FT

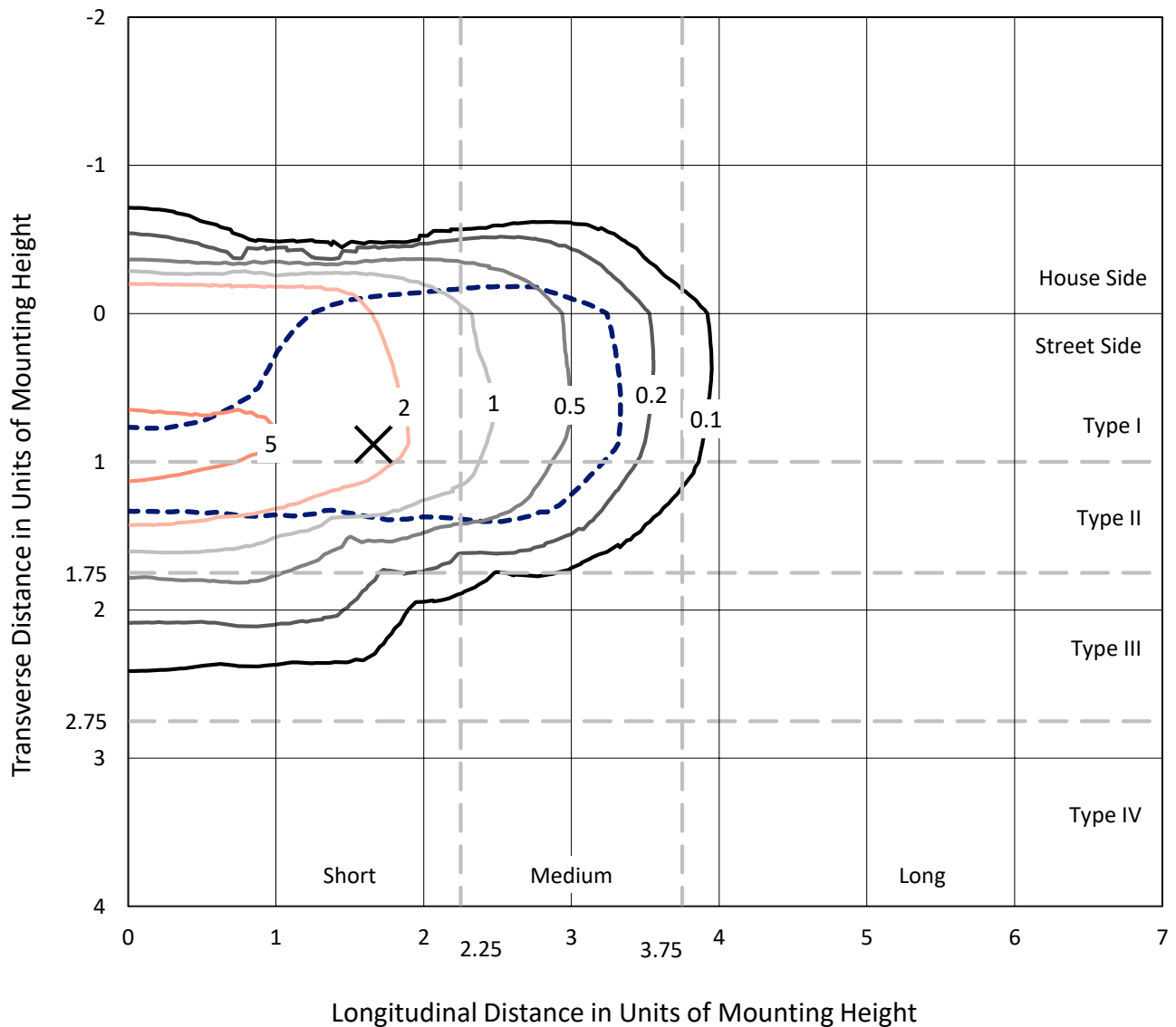


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

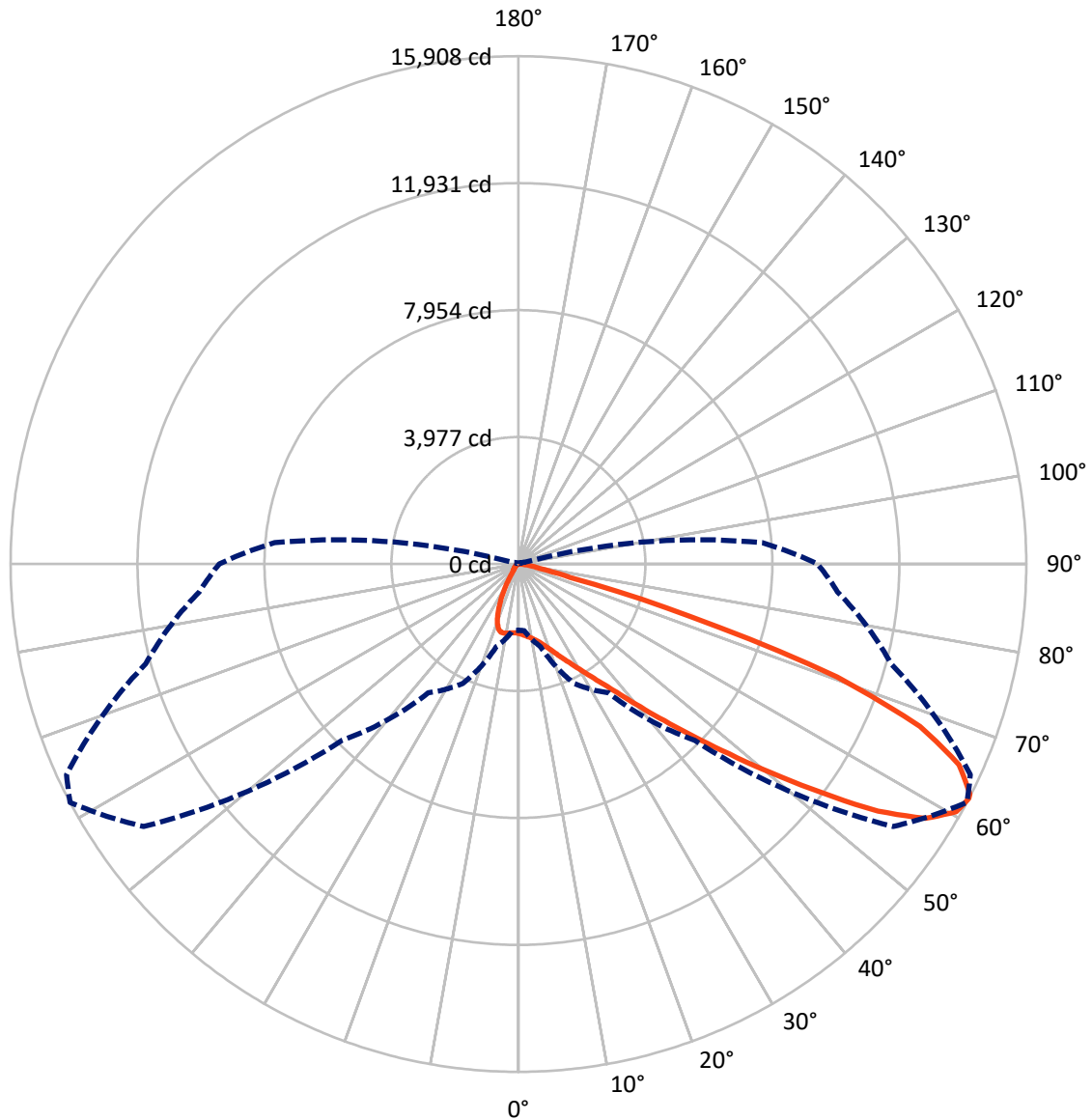


Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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



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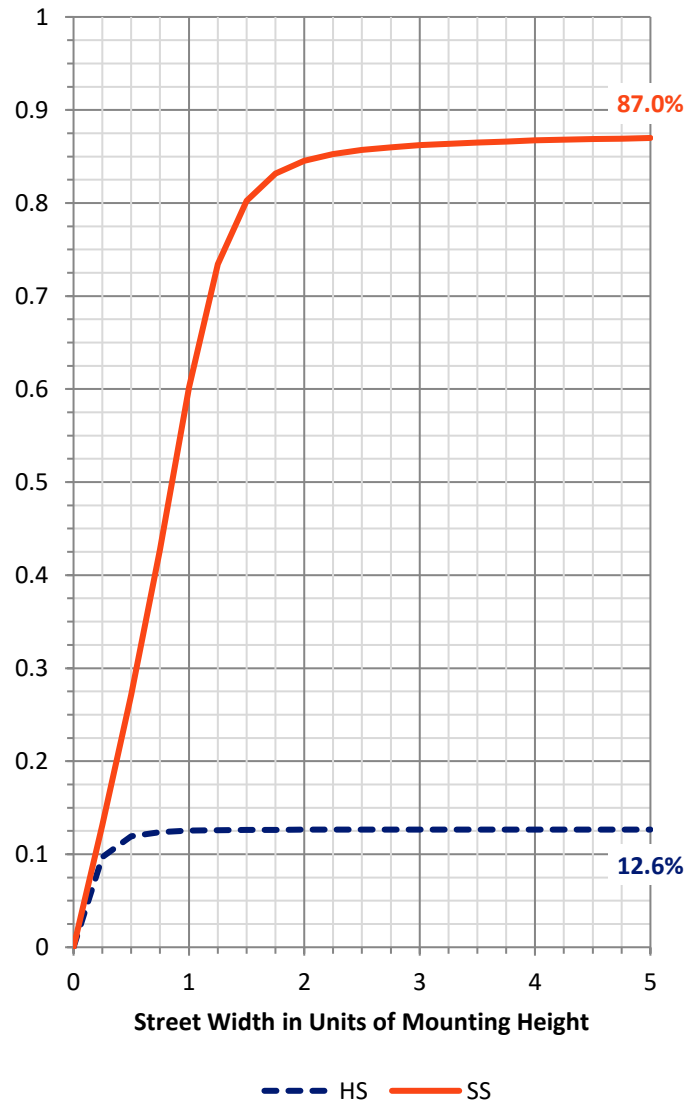
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2313.8	0.0	2313.8
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	15781.8	0.0	15781.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	18095.6	0.0	18095.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.8	1.2
10°-20°	585.8	3.2
20°-30°	983.8	5.4
30°-40°	1885.9	10.4
40°-50°	3852.1	21.3
50°-60°	5097.6	28.2
60°-70°	3960.0	21.9
70°-80°	1429.4	7.9
80°-90°	91.1	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°	18095.6	100.0
0°-180°	18095.6	100.0

Coefficient of Utilization



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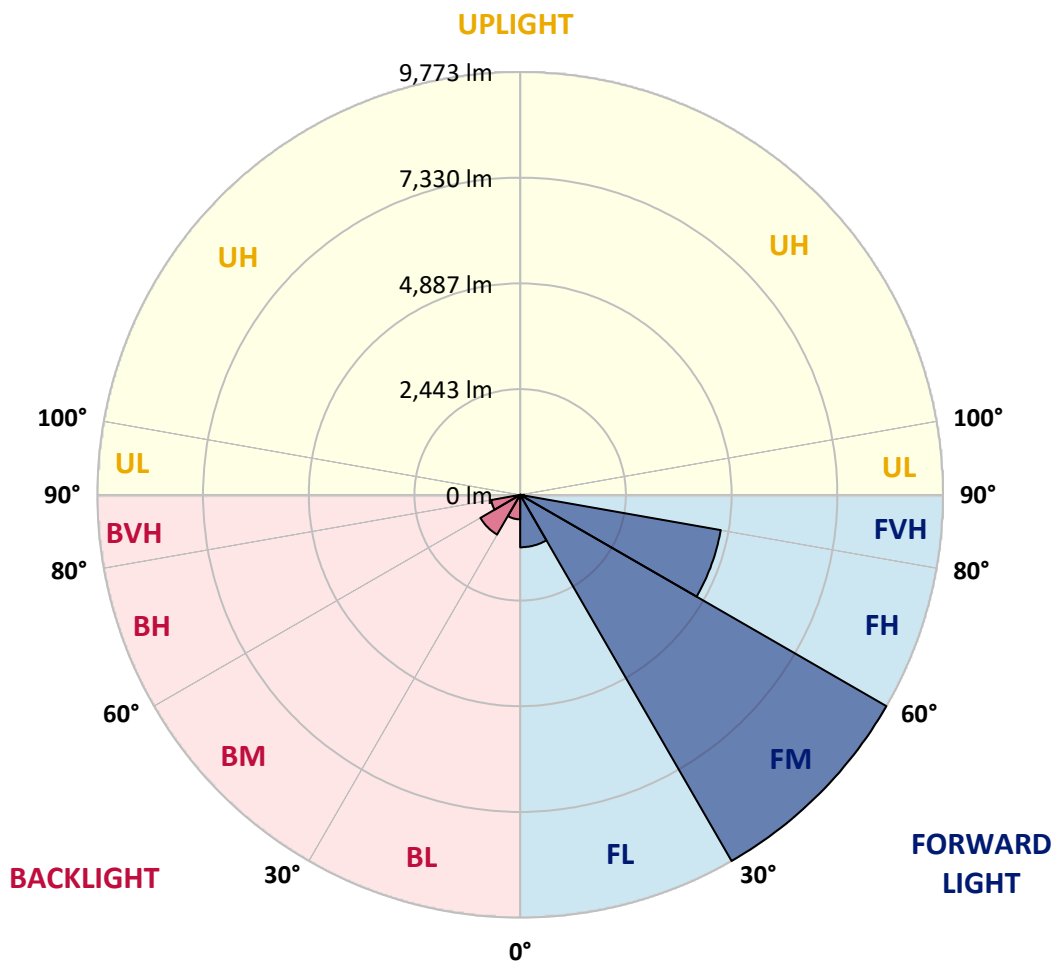
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1213.2	6.7			
FM (30°-60°)	9773.5	54.0			
FH (60°-80°)	4708.1	26.0			G2/5000
FVH (80°-90°)	87.1	0.5			G1/100
BL (0°-30°)	566.3	3.1	B2/1000		
BM (30°-60°)	1062.2	5.9	B2/2500		
BH (60°-80°)	681.3	3.8	B2/1000		G2/1000
BVH (80°-90°)	4.0	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-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8
2.5°	2237.7	2233.2	2228.8	2224.4	2224.4	2219.9	2215.4	2206.5	2197.7	2188.7	2184.3
5°	2277.7	2273.3	2268.8	2273.3	2268.8	2268.8	2264.4	2255.5	2246.7	2233.2	2219.9
7.5°	2308.9	2304.4	2300.0	2304.4	2308.9	2313.3	2317.7	2308.9	2304.4	2286.6	2273.3
10°	2348.9	2344.4	2340.1	2348.9	2348.9	2371.2	2375.6	2371.2	2366.7	2353.3	2331.1
12.5°	2406.6	2411.2	2411.2	2420.0	2428.9	2455.6	2464.6	2451.3	2451.3	2433.4	2406.6
15°	2513.5	2513.5	2513.5	2522.4	2526.8	2562.4	2571.3	2558.0	2566.8	2535.7	2509.1
17.5°	2615.9	2620.3	2629.2	2646.9	2646.9	2678.0	2696.0	2696.0	2713.7	2673.6	2638.1
20°	2718.1	2722.7	2736.0	2775.9	2775.9	2815.9	2847.2	2860.6	2878.3	2838.3	2775.9
22.5°	2829.3	2829.3	2851.6	2913.9	2900.5	2980.5	3038.4	3060.6	3078.5	3025.1	2927.2
25°	2998.5	2980.5	2998.5	3056.3	3047.3	3158.6	3265.2	3287.5	3309.9	3247.6	3100.7
27.5°	3318.7	3292.0	3229.8	3234.2	3234.2	3363.3	3514.4	3545.6	3558.9	3505.5	3323.2
30°	3959.3	3959.3	3728.0	3572.3	3470.0	3585.7	3799.1	3852.6	3870.3	3790.3	3550.0
32.5°	5076.0	5076.0	4648.9	4252.9	3865.9	3865.9	4110.6	4208.4	4226.3	4132.8	3852.6
35°	6499.4	6490.7	5850.0	5307.2	4551.1	4266.3	4475.4	4639.9	4693.4	4568.8	4244.0
37.5°	8012.1	7954.2	7264.7	6641.9	5605.3	4906.9	4969.2	5187.2	5236.1	5133.8	4751.1
40°	9239.8	9173.1	8617.1	8096.6	6966.6	5930.2	5680.9	5881.2	5939.0	5796.7	5356.2
42.5°	10352.1	10187.5	9804.9	9431.1	8532.6	7700.6	6628.6	6708.6	6770.9	6619.6	6036.8
45°	11157.3	10903.6	10707.9	10592.3	10116.3	9644.7	7856.3	7696.1	7718.4	7531.6	6779.8
47.5°	11179.4	11001.5	11019.4	11321.9	11517.6	11499.8	9453.5	8884.0	8799.4	8488.1	7571.6
50°	10111.9	10214.2	10538.8	11401.9	12460.7	13101.3	11353.0	10289.7	10036.3	9475.7	8359.1
52.5°	8332.4	8492.4	9101.9	10556.7	12598.5	14155.8	13323.8	11895.7	11442.0	10454.4	8964.0
55°	6526.1	6535.1	7175.8	8657.1	11677.7	14347.0	14898.6	13661.9	12967.8	11197.4	9364.4
57.5°	4488.7	4733.3	5547.6	6544.1	9600.2	13394.9	15490.3	15032.1	14137.9	11655.5	9644.7
60°	2940.6	2953.9	3901.5	5053.7	6535.1	10899.2	15130.0	15757.2	15085.4	11926.8	9836.0
62°	2073.1	2095.3	2682.6	4128.4	4924.7	7811.9	14333.6	15908.4	15619.3	12087.1	10036.3
62.5°	1921.8	1939.6	2433.4	3897.0	4626.6	7006.7	14049.0	15872.8	15699.4	12140.5	10107.4
65°	1410.2	1410.2	1592.7	2678.0	3389.8	3785.7	11904.7	15165.5	15592.6	12567.5	10374.3
67.5°	1090.0	1098.8	1161.1	1650.5	2558.0	2295.4	7598.4	13572.9	14480.4	13199.2	10525.5
70°	938.6	934.1	978.8	1094.3	1846.1	1526.0	3345.4	10592.3	12127.1	13039.1	10387.6
72.5°	694.0	698.4	800.7	960.8	1285.7	992.1	1512.6	5623.1	7865.2	10205.3	8901.8
75°	444.9	449.3	564.9	756.3	925.3	649.6	872.0	1677.1	3220.9	5658.8	5445.2
77.5°	298.1	307.0	369.3	529.5	809.6	404.9	547.2	703.0	969.8	2122.1	1952.9
80°	200.2	200.2	235.7	355.9	511.6	338.1	293.7	467.1	502.7	658.4	329.1
82.5°	133.5	133.5	155.6	235.7	333.6	302.5	178.0	253.6	293.7	329.1	115.6
85°	80.0	80.0	106.8	146.9	218.0	169.1	115.6	142.3	151.3	209.0	62.3
87.5°	49.0	44.5	71.1	102.2	115.6	102.2	75.6	75.6	80.0	115.6	31.1
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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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8
2.5°	2175.3	2170.9	2166.5	2157.5	2144.3	2135.5	2126.5	2117.6	2108.7	2108.7	2122.1
5°	2215.4	2202.0	2184.3	2166.5	2139.9	2122.1	2108.7	2090.8	2082.0	2082.0	2086.5
7.5°	2264.4	2251.1	2219.9	2188.7	2148.7	2117.6	2086.5	2046.3	2015.3	2002.0	2015.3
10°	2317.7	2300.0	2255.5	2206.5	2162.0	2082.0	1979.7	1855.1	1748.3	1699.5	1721.6
12.5°	2384.6	2362.3	2308.9	2242.1	2139.9	1944.0	1690.5	1401.4	1218.9	1134.4	1152.2
15°	2482.3	2451.3	2375.6	2273.3	2046.3	1623.7	1210.0	876.3	707.3	636.2	645.1
17.5°	2598.0	2558.0	2455.6	2264.4	1806.1	1170.0	720.7	511.6	440.3	422.7	422.7
20°	2722.7	2669.3	2535.7	2197.7	1441.4	734.0	449.3	391.5	364.8	351.4	351.4
22.5°	2851.6	2780.4	2602.5	2041.9	1027.7	458.2	369.3	329.1	298.1	284.8	284.8
25°	3007.3	2913.9	2669.3	1770.6	654.0	369.3	315.8	275.8	244.7	226.9	231.4
27.5°	3189.7	3069.6	2727.1	1432.4	422.7	320.2	262.5	222.4	195.7	186.8	186.8
30°	3381.0	3238.6	2740.4	1072.1	342.6	275.8	218.0	182.4	164.6	155.6	155.6
32.5°	3643.4	3456.6	2700.3	711.7	289.2	231.4	182.4	151.3	137.9	133.5	133.5
35°	3990.5	3741.4	2606.9	440.3	244.7	191.2	151.3	133.5	120.2	115.6	115.6
37.5°	4430.9	4137.2	2442.3	302.5	209.0	155.6	128.9	115.6	106.8	102.2	102.2
40°	5018.1	4617.6	2228.8	262.5	178.0	133.5	111.2	102.2	93.5	93.5	93.5
42.5°	5640.8	5200.5	1952.9	231.4	151.3	115.6	97.8	89.0	84.5	80.0	80.0
45°	6321.6	5796.7	1610.4	204.6	128.9	102.2	89.0	75.6	71.1	71.1	71.1
47.5°	6997.7	6410.6	1236.7	178.0	111.2	89.0	75.6	66.7	62.3	57.9	57.9
50°	7691.7	6966.6	907.6	155.6	97.8	80.0	66.7	57.9	49.0	44.5	44.5
52.5°	8194.5	7300.3	662.9	133.5	84.5	66.7	53.4	44.5	35.7	31.1	31.1
55°	8563.7	7504.9	484.9	111.2	75.6	57.9	44.5	35.7	26.7	26.7	22.3
57.5°	8852.8	7602.7	364.8	97.8	66.7	49.0	35.7	26.7	22.3	17.7	17.7
60°	9075.2	7607.2	271.4	80.0	57.9	40.1	26.7	17.7	13.4	13.4	13.4
62°	9369.0	7665.1	222.4	66.7	53.4	35.7	22.3	13.4	9.0	4.4	4.4
62.5°	9453.5	7687.2	213.5	66.7	49.0	31.1	17.7	13.4	9.0	4.4	4.4
65°	9845.0	7727.3	164.6	53.4	40.1	26.7	13.4	9.0	0.0	0.0	0.0
67.5°	10200.9	7665.1	120.2	40.1	31.1	17.7	13.4	4.4	0.0	0.0	0.0
70°	10165.2	7238.1	84.5	26.7	22.3	13.4	9.0	0.0	0.0	0.0	0.0
72.5°	8376.9	5418.4	57.9	22.3	13.4	9.0	4.4	0.0	0.0	0.0	0.0
75°	5058.1	2371.2	40.1	13.4	13.4	9.0	4.4	0.0	0.0	0.0	0.0
77.5°	1659.3	858.6	26.7	9.0	9.0	4.4	4.4	0.0	0.0	0.0	0.0
80°	271.4	142.3	13.4	9.0	9.0	4.4	4.4	0.0	0.0	0.0	0.0
82.5°	84.5	35.7	9.0	9.0	4.4	4.4	0.0	0.0	0.0	0.0	0.0
85°	31.1	13.4	9.0	9.0	4.4	4.4	0.0	0.0	0.0	0.0	0.0
87.5°	13.4	9.0	9.0	9.0	4.4	4.4	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)