

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: P236976

Luminaire Tested: **ARCH-L-AF72-230-D-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236976
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-230-D-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21799.1 lumens
Efficiency: N/A
Efficacy: 95.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B1 - U0 - G3

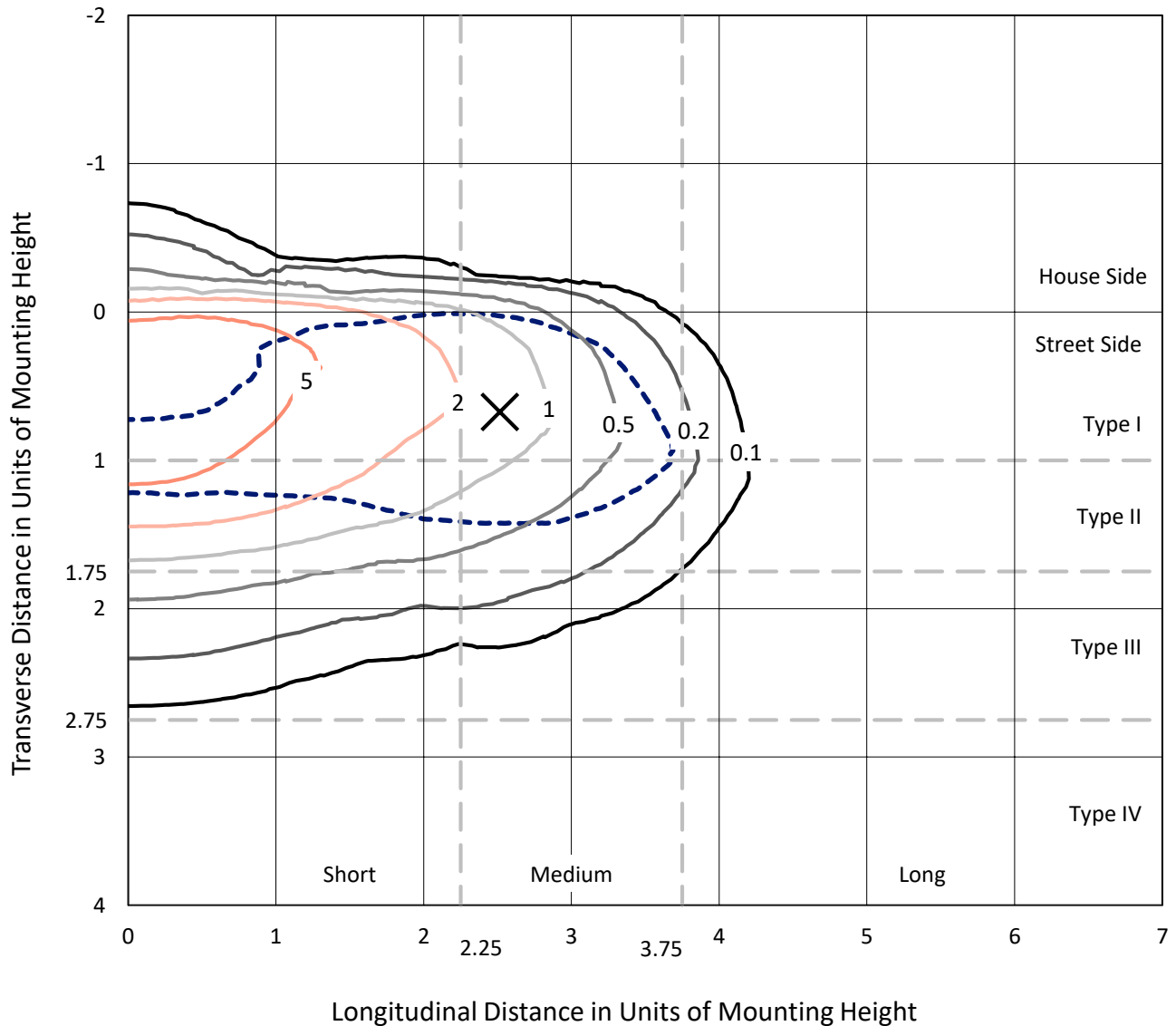
Input Watts (W): 229
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

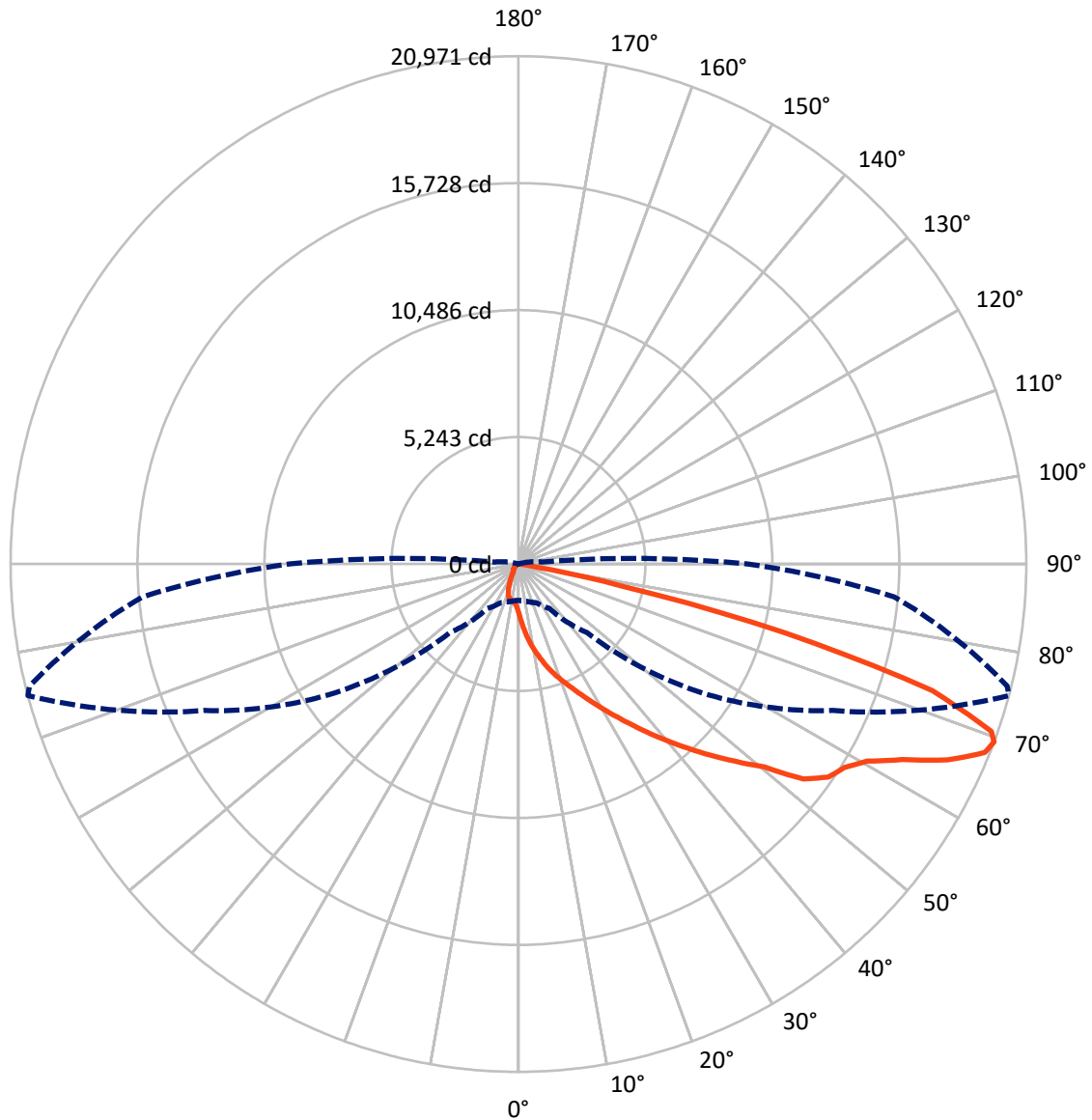
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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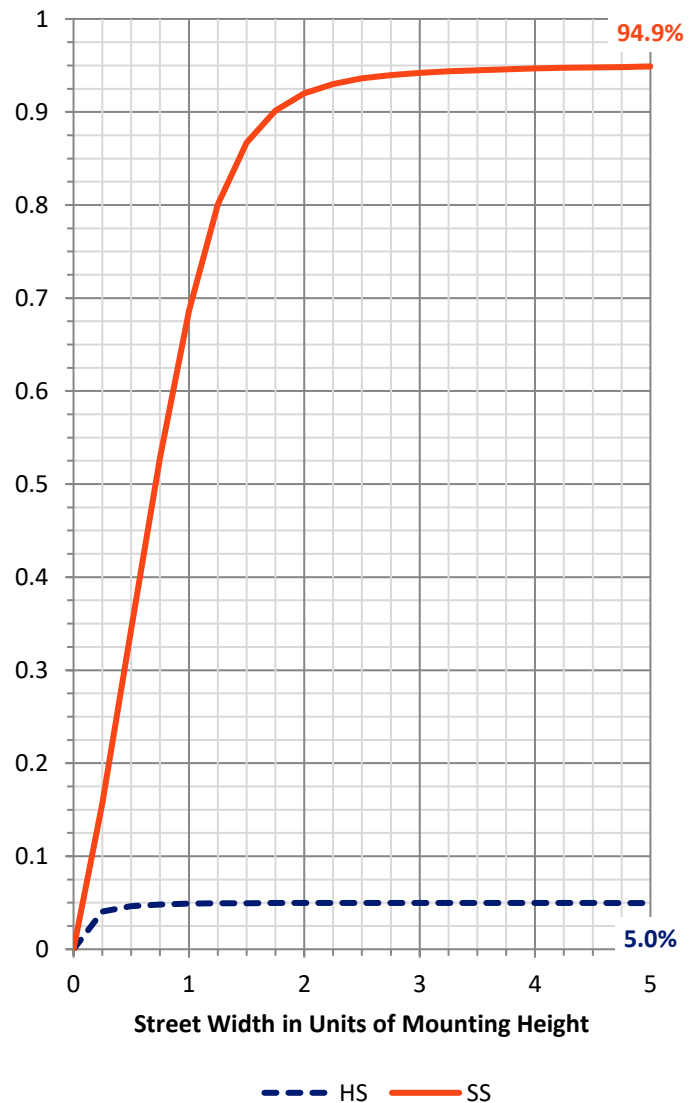
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1087.6	0.0	1087.6
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	20711.5	0.0	20711.5
	% Fixture	95.0	0.0	95.0
Total	Lumens	21799.1	0.0	21799.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.5	1.1
10°-20°	845.6	3.9
20°-30°	1614.3	7.4
30°-40°	2895.7	13.3
40°-50°	4436.5	20.4
50°-60°	5156.2	23.7
60°-70°	4565.9	20.9
70°-80°	1969.5	9.0
80°-90°	78.9	0.4
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°	21799.1	100.0
0°-180°	21799.1	100.0

Coefficient of Utilization



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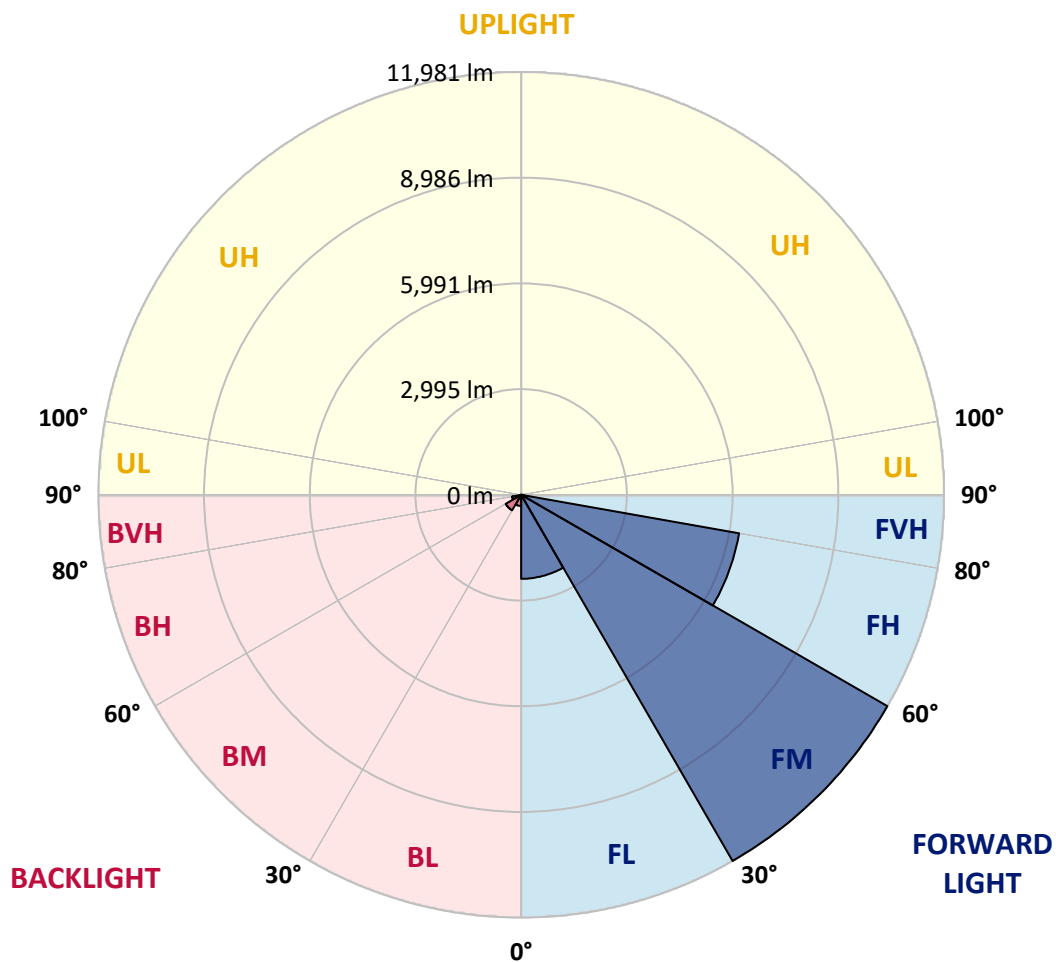
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2380.5	10.9			
FM	(30°-60°)	11981.3	55.0			
FH	(60°-80°)	6271.9	28.8			G3/7500
FVH	(80°-90°)	77.7	0.4			G1/100
BL	(0°-30°)	315.9	1.4	B1/500		
BM	(30°-60°)	507.1	2.3	B1/1000		
BH	(60°-80°)	263.5	1.2	B1/500		G1/500
BVH	(80°-90°)	1.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2028.4	2028.4	2028.4	2028.4	2028.4	2028.4	2028.4	2028.4	2028.4	2028.4	2028.4
2.5°	3341.5	3308.5	3275.6	3237.9	3153.1	3007.3	2823.8	2626.1	2381.3	2339.0	2141.3
5°	4056.8	4042.7	4009.8	3958.0	3863.8	3703.8	3496.8	3205.0	2795.5	2724.9	2306.0
7.5°	4560.3	4550.9	4522.7	4461.5	4376.8	4216.8	4000.4	3685.0	3209.7	3129.6	2513.2
10°	5012.2	5007.4	4983.9	4927.5	4842.8	4668.6	4438.0	4108.6	3605.0	3515.6	2753.2
12.5°	5421.6	5426.3	5416.9	5388.7	5327.5	5162.7	4899.2	4541.5	3986.2	3887.4	3040.2
15°	5661.6	5675.7	5713.4	5769.9	5788.7	5656.9	5384.0	4988.6	4376.8	4292.1	3369.7
17.5°	5581.6	5595.7	5713.4	5906.3	6089.9	6108.8	5864.0	5412.2	4762.8	4678.1	3694.4
20°	5388.7	5407.5	5529.9	5793.4	6151.1	6400.5	6301.7	5873.4	5129.8	5026.3	4005.1
22.5°	5605.2	5605.2	5642.8	5802.8	6127.6	6518.1	6649.9	6334.6	5506.3	5379.3	4315.6
25°	6348.7	6334.6	6254.6	6188.8	6292.3	6640.5	6913.5	6805.3	5948.7	5802.8	4645.1
27.5°	7290.0	7355.8	7205.3	6965.3	6730.0	6880.6	7148.8	7271.1	6438.1	6287.6	4983.9
30°	8344.2	8372.4	8193.6	7873.6	7459.5	7313.5	7426.5	7671.2	6970.0	6805.3	5336.9
32.5°	9294.8	9271.3	9120.7	8786.5	8273.6	7958.3	7784.1	7991.2	7548.9	7360.5	5699.3
35°	10137.2	10156.1	9972.5	9586.7	9083.1	8748.9	8334.8	8353.6	8198.3	7981.8	6118.2
37.5°	10894.9	10862.0	10687.9	10302.0	9845.5	9483.1	9045.4	8730.1	8909.0	8683.0	6588.7
40°	11511.5	11478.5	11295.0	10918.5	10490.3	10193.7	9850.2	9233.7	9657.3	9398.4	7092.3
42.5°	12001.0	11963.3	11808.0	11445.6	11031.5	10767.9	10603.2	9854.9	10457.3	10198.4	7657.1
45°	12240.9	12208.0	12113.9	11841.0	11478.5	11248.0	11328.0	10570.3	11313.8	11097.4	8278.3
47.5°	11958.6	11944.5	12052.7	12005.7	11798.6	11676.3	11953.9	11351.5	12212.7	12001.0	8993.7
50°	11102.1	11125.6	11440.9	11831.6	11930.4	12076.2	12466.9	12175.1	13177.6	12951.6	9817.3
52.5°	8989.0	9149.0	10099.6	11040.9	11770.4	12320.9	13069.3	13351.7	14749.4	14528.3	11102.1
55°	6711.2	6777.0	7812.4	9421.9	11125.6	12302.1	13516.4	14043.5	15525.9	15300.1	11440.9
57.5°	5322.8	5346.4	5859.3	7501.8	9798.4	11878.6	13751.6	14292.9	15864.7	15676.5	11944.5
60°	4179.2	4207.4	4579.1	5708.7	7930.0	10734.9	13412.8	14509.4	16528.3	16377.7	12824.5
62.5°	3252.1	3280.3	3506.2	4169.8	5948.7	8974.9	12730.4	14857.6	17789.6	17719.0	14264.6
65°	2517.9	2527.3	2682.6	2993.2	4202.7	7068.8	11897.4	15182.4	19493.4	19432.2	15431.8
67.5°	1859.0	1873.1	1981.4	2174.3	2837.9	5078.0	10532.6	14932.9	20778.1	20599.3	15855.3
69°	1501.3	1515.4	1609.5	1764.9	2240.2	4000.4	9285.4	14316.4	20971.1	20801.6	15587.1
70°	1284.8	1294.2	1388.3	1520.1	1910.8	3397.9	8297.2	13784.7	20716.9	20552.2	14975.3
72.5°	823.6	870.6	964.7	1049.4	1266.0	2249.6	5600.5	11431.5	17874.3	17592.0	11728.0
75°	456.5	470.7	640.1	743.6	842.4	1463.6	3115.5	7130.0	11370.3	11172.7	6273.5
77.5°	376.5	386.0	451.8	564.8	564.8	818.9	1176.6	2809.6	4325.0	3901.5	1698.9
80°	263.5	272.9	343.5	371.8	404.8	461.2	381.3	616.5	668.3	593.0	254.1
82.5°	183.5	192.9	235.3	305.9	324.7	216.5	141.2	183.5	192.9	192.9	98.8
85°	32.9	47.1	174.1	254.1	192.9	65.9	80.0	65.9	61.2	65.9	23.5
87.5°	0.0	0.0	108.2	122.3	103.5	28.2	32.9	23.5	14.1	18.8	9.4
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°	2028.4	2028.4	2028.4	2028.4	2028.4	2028.4	2028.4	2028.4	2028.4	2028.4	2028.4
2.5°	2042.5	1943.7	1774.3	1651.9	1548.3	1468.3	1435.4	1383.6	1346.0	1364.8	1341.3
5°	2099.0	1924.9	1651.9	1477.8	1355.4	1251.9	1167.2	1101.3	1049.4	1040.0	1030.6
7.5°	2188.4	1939.0	1581.3	1364.8	1181.3	1021.2	889.5	790.6	715.3	715.3	687.1
10°	2310.7	1976.6	1538.9	1251.9	978.9	762.4	630.6	536.5	498.9	494.2	484.8
12.5°	2480.2	2047.2	1506.0	1106.0	762.4	555.4	475.4	442.4	428.3	423.6	418.9
15°	2710.8	2150.8	1468.3	927.1	578.9	456.5	423.6	395.4	381.3	376.5	371.8
17.5°	2932.0	2244.9	1388.3	743.6	470.7	414.2	376.5	353.0	334.1	329.4	329.4
20°	3139.0	2324.9	1251.9	578.9	423.6	371.8	334.1	305.9	287.0	282.3	282.3
22.5°	3355.6	2390.7	1082.5	470.7	386.0	329.4	291.7	263.5	244.7	240.0	235.3
25°	3586.2	2437.8	889.5	418.9	348.2	291.7	249.4	225.9	211.8	207.0	202.3
27.5°	3835.6	2456.6	705.9	381.3	305.9	254.1	216.5	192.9	183.5	178.8	178.8
30°	4061.5	2437.8	545.9	338.8	268.2	221.2	188.2	169.4	160.0	155.3	155.3
32.5°	4296.8	2390.7	437.7	301.2	235.3	188.2	160.0	145.9	141.2	136.5	136.5
35°	4546.2	2329.6	376.5	268.2	202.3	164.7	141.2	131.8	127.1	122.3	122.3
37.5°	4838.0	2254.3	343.5	240.0	178.8	145.9	122.3	117.6	112.9	112.9	112.9
40°	5167.4	2160.2	320.0	216.5	160.0	127.1	108.2	103.5	98.8	98.8	98.8
42.5°	5515.8	2051.9	296.5	192.9	141.2	108.2	94.1	94.1	89.4	89.4	84.7
45°	5906.3	1943.7	272.9	169.4	122.3	94.1	80.0	75.3	75.3	70.6	70.6
47.5°	6367.6	1844.9	249.4	150.6	108.2	80.0	70.6	65.9	61.2	56.5	56.5
50°	7017.0	1835.5	221.2	131.8	98.8	65.9	56.5	51.8	47.1	42.4	42.4
52.5°	7661.8	1750.7	188.2	108.2	80.0	56.5	42.4	37.6	32.9	32.9	28.2
55°	7807.7	1609.5	164.7	94.1	61.2	42.4	32.9	23.5	23.5	18.8	18.8
57.5°	8127.8	1543.6	141.2	75.3	47.1	32.9	18.8	14.1	14.1	14.1	14.1
60°	8758.3	1524.8	122.3	65.9	32.9	23.5	14.1	9.4	9.4	4.7	4.7
62.5°	9629.0	1506.0	103.5	56.5	23.5	14.1	9.4	4.7	0.0	0.0	0.0
65°	10109.0	1378.9	84.7	42.4	18.8	14.1	4.7	0.0	0.0	0.0	0.0
67.5°	9982.0	1139.0	75.3	28.2	14.1	9.4	4.7	0.0	0.0	0.0	0.0
69°	9450.1	960.0	61.2	23.5	14.1	9.4	4.7	0.0	0.0	0.0	0.0
70°	8810.1	828.3	56.5	18.8	9.4	4.7	4.7	0.0	0.0	0.0	0.0
72.5°	6254.6	433.0	37.6	14.1	9.4	4.7	0.0	0.0	0.0	0.0	0.0
75°	2922.6	192.9	23.5	9.4	4.7	4.7	0.0	0.0	0.0	0.0	0.0
77.5°	644.8	89.4	14.1	9.4	4.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	122.3	32.9	9.4	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	42.4	14.1	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.1	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.7	0.0	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)