

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: P836384

Luminaire Tested: **ARCH3-180-722-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836384
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-180-722-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2200K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14285 lumens
Efficiency: N/A
Efficacy: 79.1 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 180.5
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

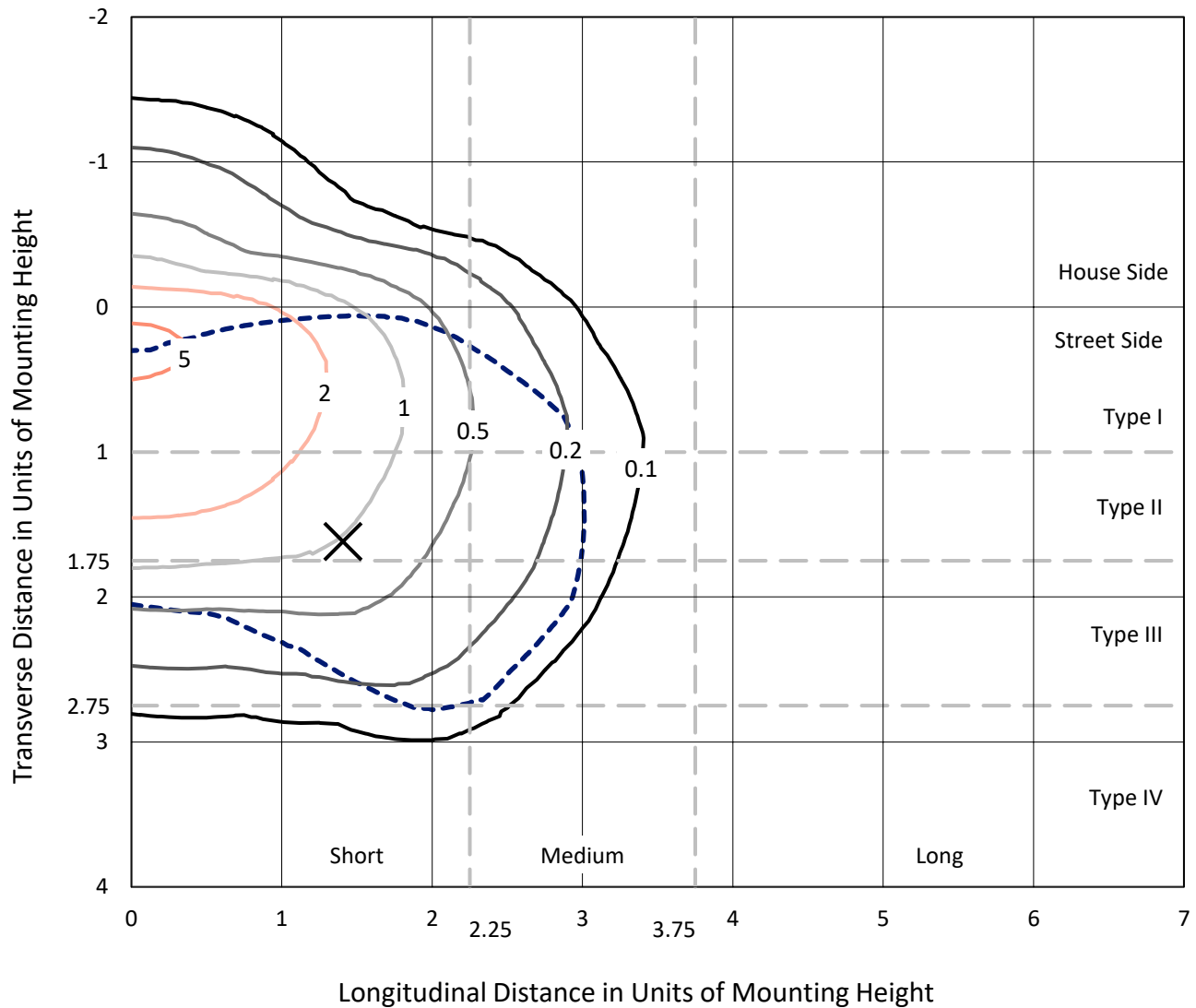


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd

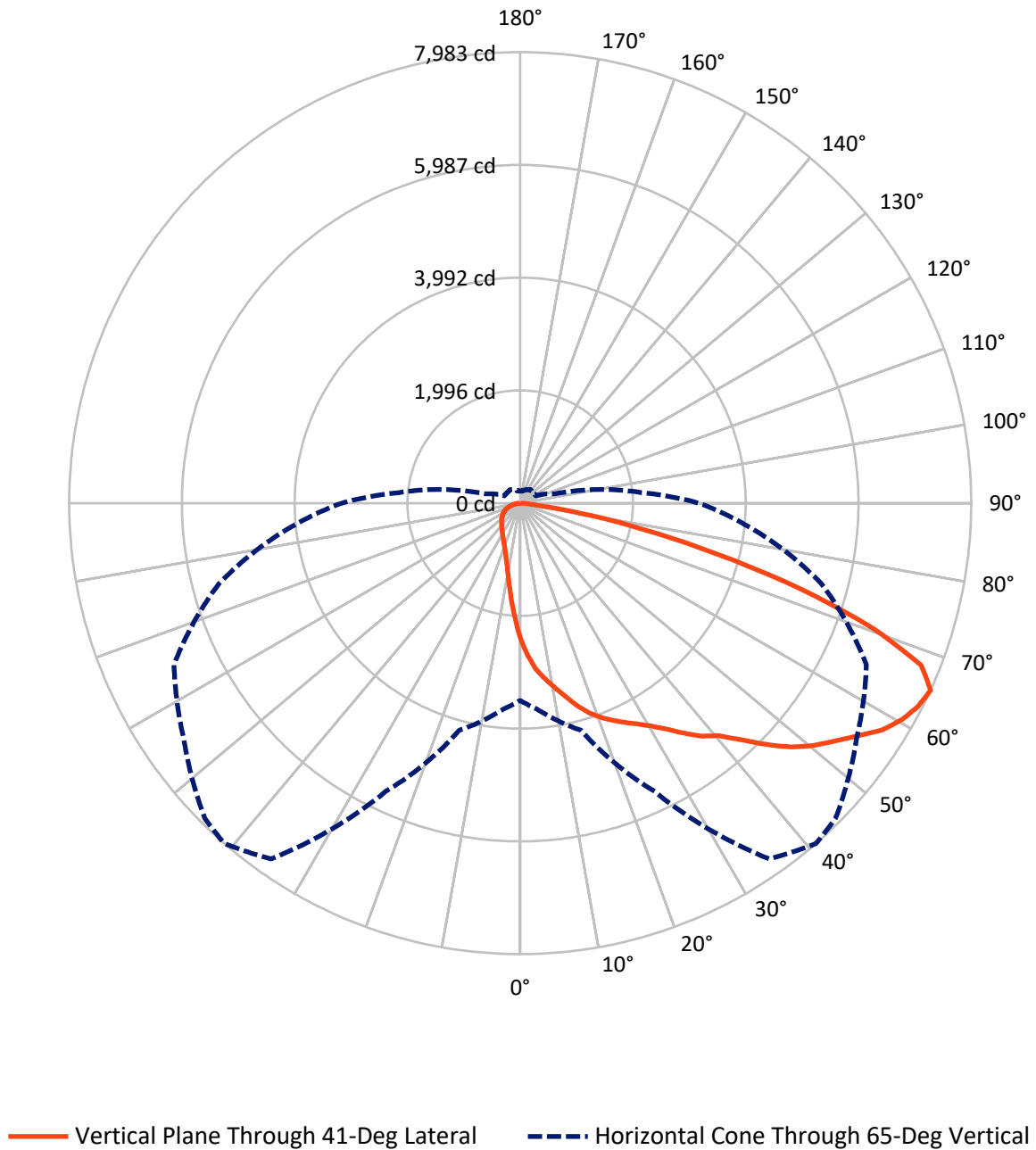


Based on 25 foot mounting height. Maximum calculated value = 5.6 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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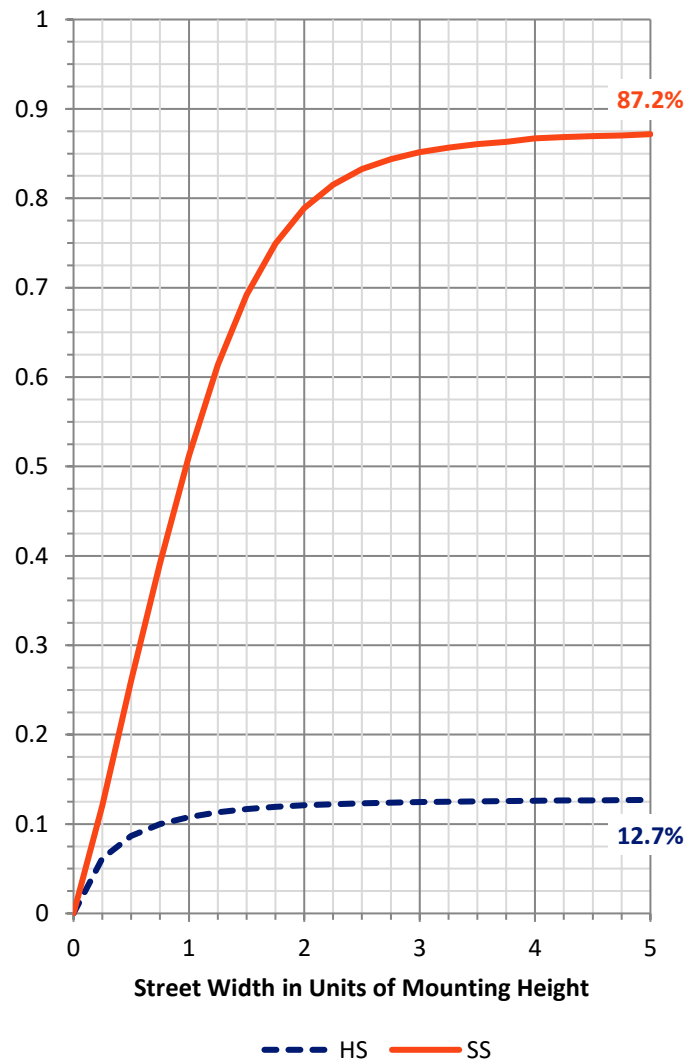
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1834.0	0.0	1834.0
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	12451.0	0.0	12451.0
	% Fixture	87.2	0.0	87.2
Total	Lumens	14285.0	0.0	14285.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.8	1.6
10°-20°	680.1	4.8
20°-30°	1169.9	8.2
30°-40°	1774.4	12.4
40°-50°	2599.5	18.2
50°-60°	3282.7	23.0
60°-70°	3078.1	21.5
70°-80°	1371.9	9.6
80°-90°	101.6	0.7
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°	14285.0	100.0
0°-180°	14285.0	100.0

Coefficient of Utilization



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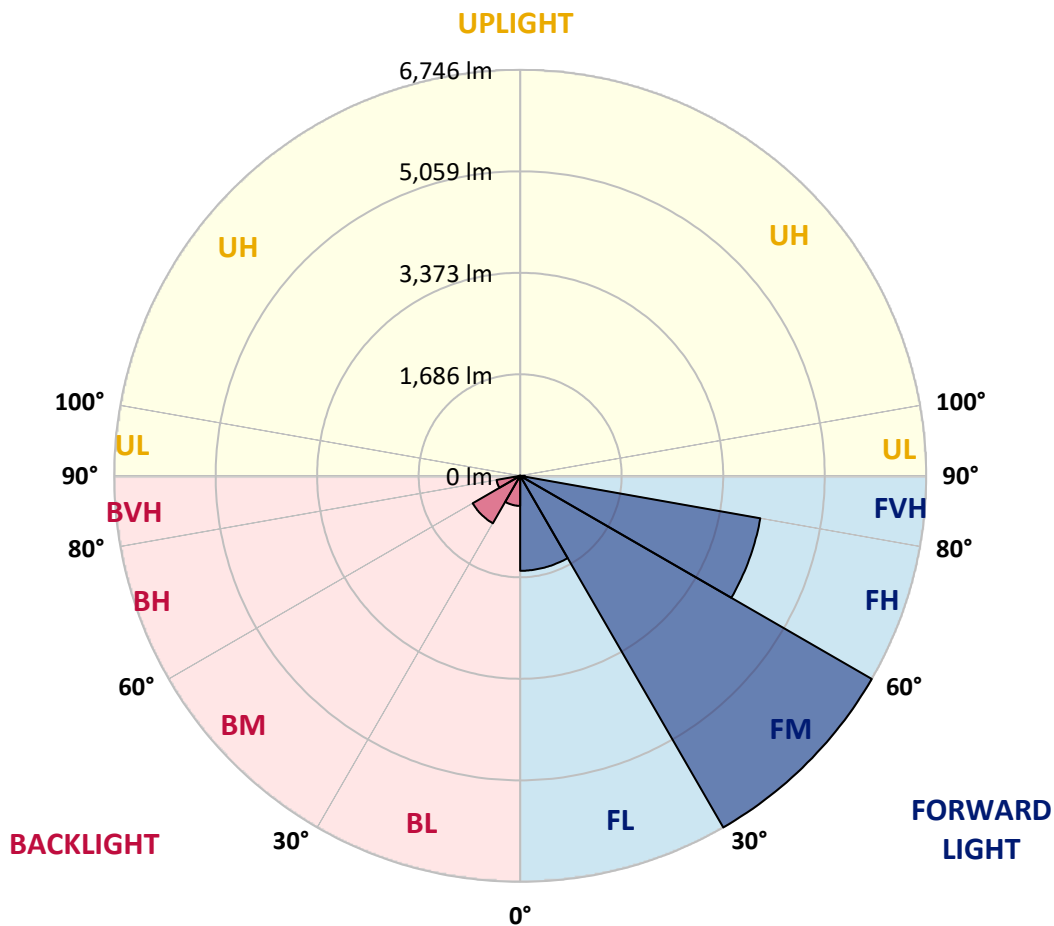
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1577.6	11.0			
FM	(30°-60°)	6745.9	47.2			
FH	(60°-80°)	4051.6	28.4			G2/5000
FVH	(80°-90°)	75.9	0.5			G1/100
BL	(0°-30°)	499.2	3.5	B1/500		
BM	(30°-60°)	910.7	6.4	B1/1000		
BH	(60°-80°)	398.4	2.8	B1/500		G1/500
BVH	(80°-90°)	25.7	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2434.1	2434.1	2434.1	2434.1	2434.1	2434.1	2434.1	2434.1	2434.1	2434.1	2434.1
2.5°	2807.6	2798.6	2792.6	2759.4	2759.4	2714.3	2717.3	2675.1	2623.9	2542.5	2455.2
5°	3072.7	3060.7	3045.6	3012.5	3000.4	2955.2	2949.2	2889.0	2801.6	2660.0	2503.4
7.5°	3304.7	3292.6	3271.6	3223.4	3190.2	3136.0	3120.9	3042.6	2946.2	2771.5	2551.6
10°	3515.6	3506.5	3479.4	3419.2	3374.0	3307.7	3280.6	3175.2	3054.7	2861.9	2590.7
12.5°	3729.5	3717.4	3681.3	3630.0	3575.8	3497.5	3464.4	3328.8	3175.2	2961.3	2648.0
15°	3928.3	3910.2	3883.1	3828.9	3780.7	3705.4	3669.2	3509.5	3322.8	3072.7	2723.3
17.5°	4057.8	4042.8	4018.7	3988.5	3949.4	3892.1	3856.0	3699.3	3470.4	3181.2	2801.6
20°	4136.1	4130.1	4121.1	4103.0	4084.9	4045.8	4018.7	3871.0	3630.0	3286.6	2876.9
22.5°	4196.4	4190.4	4187.4	4187.4	4190.4	4175.3	4157.2	4030.7	3783.7	3398.1	2946.2
25°	4289.8	4286.8	4280.7	4274.7	4295.8	4298.8	4292.8	4205.4	3976.5	3545.7	3033.6
27.5°	4419.3	4410.3	4398.2	4392.2	4413.3	4428.4	4440.4	4380.2	4181.3	3696.3	3133.0
30°	4618.1	4591.0	4560.9	4539.8	4554.9	4579.0	4606.1	4569.9	4392.2	3883.1	3235.4
32.5°	4853.1	4820.0	4750.7	4711.5	4750.7	4768.8	4789.9	4771.8	4612.1	4084.9	3337.8
35°	5139.3	5100.1	5027.8	4970.6	5039.9	5000.7	4991.7	4973.6	4820.0	4283.8	3452.3
37.5°	5615.3	5558.0	5443.6	5317.0	5317.0	5232.7	5199.6	5145.3	5006.8	4461.5	3563.8
40°	6166.6	6091.2	5943.6	5756.9	5585.2	5410.4	5389.3	5350.2	5226.7	4666.3	3690.3
42.5°	6772.1	6627.5	6422.6	6196.7	5919.5	5720.7	5672.5	5561.1	5440.6	4874.2	3816.8
45°	7443.9	7142.6	6844.4	6729.9	6272.0	6091.2	6000.9	5799.0	5663.5	5091.1	3949.4
47.5°	7552.3	7317.3	7118.5	7100.4	6600.4	6449.7	6347.3	6058.1	5904.5	5323.1	4087.9
50°	7492.1	7350.5	7371.6	7299.3	6841.4	6741.9	6663.6	6335.3	6142.5	5546.0	4214.5
52.5°	7239.0	7317.3	7437.8	7305.3	7070.3	6989.0	6949.8	6633.5	6365.4	5750.8	4328.9
55°	6937.8	6992.0	7251.1	7413.7	7335.4	7263.1	7227.0	6979.9	6585.3	5922.5	4434.4
57.5°	6497.9	6473.8	6760.0	7395.7	7612.6	7570.4	7531.2	7320.3	6790.1	6046.1	4500.7
60°	5838.2	5787.0	6148.5	7034.2	7702.9	7769.2	7751.1	7546.3	6946.8	6043.0	4473.5
62.5°	4696.5	4823.0	5323.1	6443.7	7742.1	7910.8	7877.7	7564.4	6998.0	5868.3	4301.8
65°	3491.5	3672.2	4163.3	5630.3	7687.9	7983.1	7892.7	7269.1	6760.0	5521.9	3925.3
67.5°	2515.4	2675.1	3033.6	4633.2	7166.7	7651.7	7546.3	6787.1	6211.7	5030.9	3404.1
70°	1720.1	1834.6	2078.6	3374.0	6118.4	6615.4	6549.1	6067.1	5347.2	4446.4	2765.5
72.5°	1214.0	1262.2	1418.9	2226.2	4648.3	5190.5	5112.2	4991.7	4295.8	3696.3	2150.9
75°	909.8	939.9	1024.2	1440.0	3136.0	3596.9	3524.6	3593.9	3208.3	2798.6	1566.5
77.5°	343.4	373.5	581.4	918.8	1855.7	2208.2	2135.9	2178.0	1783.4	1412.9	780.2
80°	93.4	99.4	192.8	436.8	843.5	1099.6	1000.1	858.6	662.7	650.7	412.7
82.5°	39.2	45.2	87.4	235.0	301.2	301.2	253.0	313.3	253.0	304.3	198.8
85°	15.1	18.1	21.1	60.2	39.2	42.2	45.2	60.2	51.2	63.3	45.2
87.5°	0.0	0.0	0.0	3.0	3.0	6.0	3.0	6.0	9.0	9.0	9.0
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°	2434.1	2434.1	2434.1	2434.1	2434.1	2434.1	2434.1	2434.1	2434.1	2434.1	2434.1
2.5°	2419.0	2385.9	2337.7	2259.4	2178.0	2132.8	2075.6	2066.6	2006.3	2000.3	1976.2
5°	2434.1	2364.8	2241.3	2090.7	1943.1	1828.6	1744.2	1699.0	1611.7	1611.7	1587.6
7.5°	2446.1	2337.7	2138.9	1915.9	1714.1	1560.5	1446.0	1397.8	1319.5	1313.4	1295.4
10°	2449.2	2304.6	2027.4	1738.2	1491.2	1334.5	1223.1	1168.8	1099.6	1093.5	1081.5
12.5°	2473.3	2286.5	1928.0	1584.6	1331.5	1162.8	1054.4	1009.2	955.0	948.9	936.9
15°	2512.4	2286.5	1843.6	1455.0	1189.9	1033.3	939.9	897.7	858.6	852.5	846.5
17.5°	2551.6	2280.5	1759.3	1334.5	1072.4	930.9	849.5	816.4	786.3	783.2	777.2
20°	2587.7	2277.4	1674.9	1232.1	982.1	846.5	783.2	753.1	729.0	729.0	726.0
22.5°	2623.9	2271.4	1593.6	1135.7	903.7	783.2	729.0	695.9	677.8	677.8	674.8
25°	2678.1	2271.4	1518.3	1054.4	840.5	735.0	680.8	656.7	641.7	638.6	638.6
27.5°	2741.4	2289.5	1452.0	982.1	786.3	686.8	644.7	620.6	602.5	596.5	599.5
30°	2810.7	2304.6	1391.8	918.8	735.0	650.7	605.5	581.4	563.3	557.3	560.3
32.5°	2879.9	2322.6	1337.5	861.6	683.8	617.6	572.4	545.3	527.2	524.2	524.2
35°	2955.2	2340.7	1283.3	813.4	641.7	584.4	542.2	512.1	500.1	494.0	497.1
37.5°	3030.6	2370.8	1232.1	768.2	611.5	554.3	515.1	485.0	476.0	473.0	473.0
40°	3120.9	2416.0	1211.0	738.1	584.4	527.2	494.0	463.9	454.9	454.9	454.9
42.5°	3196.2	2452.2	1192.9	704.9	563.3	503.1	473.0	448.9	442.8	439.8	442.8
45°	3271.6	2485.3	1168.8	674.8	536.2	479.0	454.9	430.8	424.8	424.8	424.8
47.5°	3346.9	2503.4	1135.7	644.7	512.1	457.9	436.8	415.7	409.7	409.7	409.7
50°	3407.1	2518.4	1087.5	611.5	485.0	439.8	418.7	397.6	391.6	391.6	391.6
52.5°	3467.4	2521.5	1036.3	572.4	457.9	418.7	400.7	379.6	373.5	370.5	370.5
55°	3521.6	2518.4	976.0	527.2	427.8	394.6	379.6	361.5	349.4	337.4	343.4
57.5°	3560.8	2515.4	906.8	482.0	397.6	370.5	364.5	340.4	316.3	286.2	292.2
60°	3545.7	2482.3	831.4	424.8	364.5	346.4	346.4	313.3	271.1	256.1	259.1
62.5°	3449.3	2388.9	753.1	364.5	331.4	322.3	319.3	283.2	250.0	235.0	238.0
65°	3160.1	2153.9	638.6	310.3	298.2	295.2	295.2	262.1	232.0	213.9	216.9
67.5°	2720.3	1807.5	521.2	262.1	265.1	271.1	271.1	241.0	210.9	192.8	195.8
70°	2181.0	1412.9	415.7	225.9	228.9	238.0	244.0	216.9	189.8	171.7	171.7
72.5°	1641.8	1072.4	334.4	189.8	204.8	204.8	213.9	192.8	165.7	147.6	150.6
75°	1189.9	768.2	265.1	159.7	177.7	174.7	174.7	162.7	141.6	129.5	129.5
77.5°	563.3	403.7	210.9	114.5	138.6	135.6	138.6	129.5	120.5	108.4	111.5
80°	277.1	198.8	135.6	81.3	96.4	99.4	108.4	102.4	99.4	90.4	90.4
82.5°	132.5	78.3	63.3	57.2	66.3	69.3	75.3	75.3	78.3	72.3	72.3
85°	36.1	21.1	27.1	36.1	42.2	45.2	51.2	54.2	54.2	51.2	54.2
87.5°	9.0	9.0	12.0	18.1	21.1	24.1	27.1	27.1	12.0	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)