

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: P237091

Luminaire Tested: **ARCH-L-AF72-180-D-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237091
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-180-D-U-T3
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23023.6 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 181
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

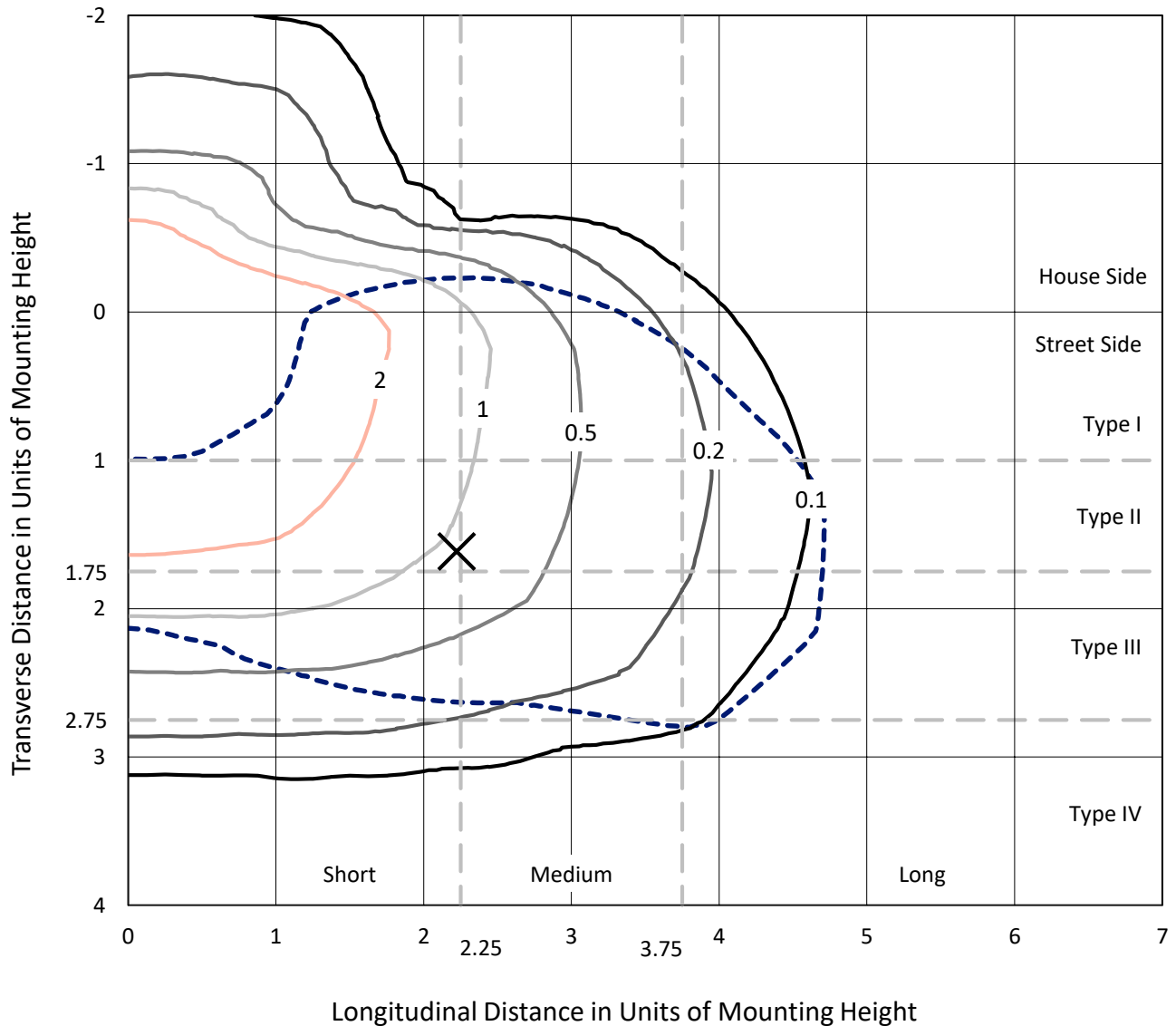


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

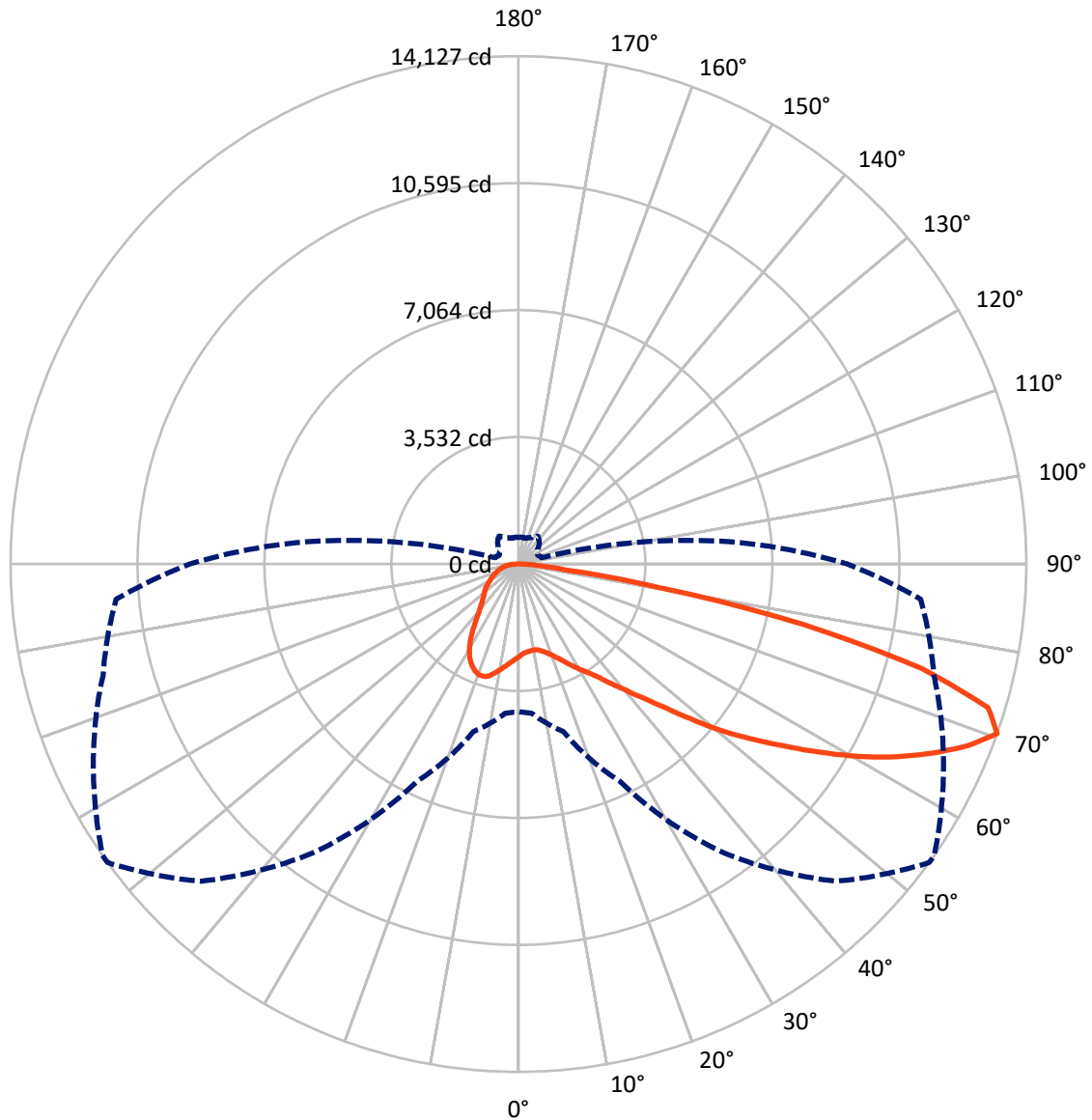


Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5221.7	0.0	5221.7
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	17801.9	0.0	17801.9
	% Fixture	77.3	0.0	77.3
Total	Lumens	23023.6	0.0	23023.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.8	1.1
10°-20°	807.7	3.5
20°-30°	1403.3	6.1
30°-40°	2050.8	8.9
40°-50°	3218.6	14.0
50°-60°	4949.5	21.5
60°-70°	6047.0	26.3
70°-80°	3749.2	16.3
80°-90°	544.7	2.4
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°	23023.6	100.0
0°-180°	23023.6	100.0

Coefficient of Utilization



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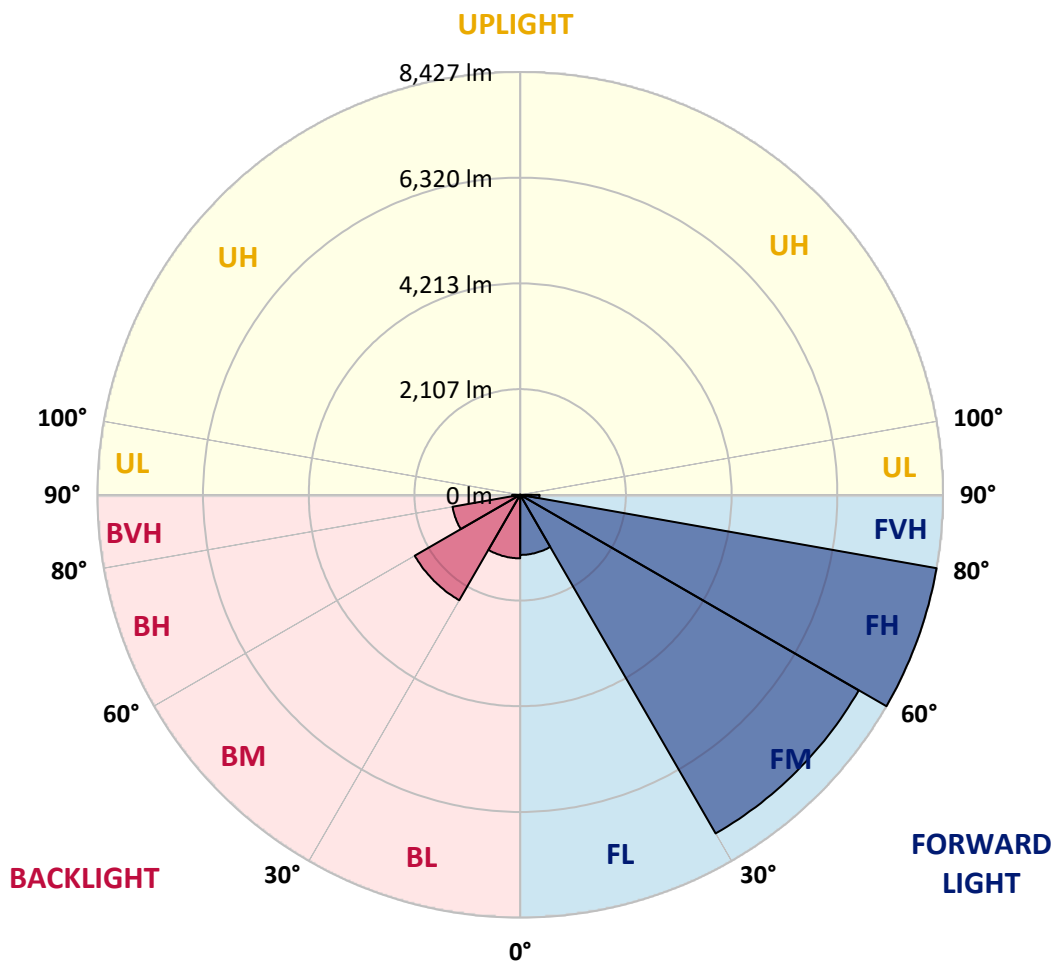
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1197.9	5.2			
FM	(30°-60°)	7792.4	33.8			
FH	(60°-80°)	8427.0	36.6			G4/12000
FVH	(80°-90°)	384.6	1.7			G3/500
BL	(0°-30°)	1265.9	5.5	B3/2500		
BM	(30°-60°)	2426.4	10.5	B2/2500		
BH	(60°-80°)	1369.3	5.9	B3/2500		G3/2500
BVH	(80°-90°)	160.1	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2575.9	2575.9	2575.9	2575.9	2575.9	2575.9	2575.9	2575.9	2575.9	2575.9	2575.9
2.5°	2474.7	2466.2	2466.2	2478.9	2483.1	2495.8	2495.8	2500.0	2512.7	2533.7	2559.0
5°	2398.8	2394.6	2398.8	2415.7	2424.1	2449.4	2457.8	2462.0	2487.3	2521.1	2559.0
7.5°	2322.9	2318.7	2327.1	2352.5	2377.7	2415.7	2436.8	2441.0	2478.9	2525.3	2575.9
10°	2297.6	2293.5	2306.0	2327.1	2352.5	2394.6	2428.3	2432.6	2487.3	2542.1	2613.8
12.5°	2331.3	2327.1	2339.8	2360.9	2386.1	2415.7	2453.6	2457.8	2529.5	2601.2	2677.1
15°	2415.7	2415.7	2419.9	2432.6	2457.8	2483.1	2516.9	2521.1	2597.0	2681.3	2757.2
17.5°	2546.3	2537.9	2537.9	2533.7	2550.6	2563.2	2605.4	2609.5	2689.7	2765.5	2841.5
20°	2706.5	2702.3	2685.5	2664.4	2660.2	2668.6	2710.8	2715.0	2795.1	2858.3	2930.0
22.5°	2900.5	2904.7	2866.7	2820.4	2799.3	2812.0	2849.9	2854.1	2913.2	2968.0	3031.2
25°	3157.6	3145.0	3090.2	3022.7	2980.6	2980.6	3018.5	3018.5	3073.4	3107.1	3149.3
27.5°	3402.1	3376.9	3326.3	3229.4	3161.8	3174.5	3212.5	3212.5	3263.0	3275.7	3296.8
30°	3667.8	3642.5	3579.2	3457.0	3368.5	3360.0	3406.4	3402.1	3469.6	3465.5	3448.6
32.5°	3992.4	3979.8	3874.3	3718.3	3600.3	3570.8	3613.0	3617.2	3659.3	3646.7	3591.9
35°	4447.7	4443.5	4346.5	4072.5	3916.5	3861.7	3887.0	3887.0	3916.5	3882.8	3790.0
37.5°	5021.1	5029.4	4945.1	4540.5	4321.3	4228.5	4232.7	4228.5	4236.9	4199.0	4102.0
40°	5594.4	5615.5	5611.3	5122.2	4844.0	4683.8	4624.8	4616.4	4637.4	4620.6	4527.8
42.5°	6349.0	6399.6	6281.6	5838.9	5526.9	5257.1	5097.0	5075.9	5122.2	5143.3	5054.8
45°	7133.1	7116.4	6930.8	6610.4	6328.0	5982.2	5678.7	5644.9	5678.7	5741.9	5649.2
47.5°	7542.1	7529.4	7483.1	7322.9	7280.8	6884.5	6424.9	6395.4	6332.2	6420.8	6311.1
50°	8216.6	8229.3	8039.6	8022.7	8199.8	7980.6	7268.1	7200.7	7086.8	7158.5	7065.7
52.5°	8705.7	8650.9	8532.8	8680.4	9232.6	9114.6	8060.6	8031.2	7925.7	7908.8	7866.7
55°	8903.9	8903.9	8924.9	9266.4	10054.8	9898.8	8920.6	8950.2	8806.9	8688.8	8743.7
57.5°	8962.9	8988.2	9169.4	9734.3	11020.1	10510.1	9869.2	9911.4	9704.8	9468.7	9641.6
60°	8672.0	8747.9	9182.1	10000.0	11564.0	11159.3	10868.4	10881.0	10581.7	10236.1	10539.6
62.5°	7925.7	8018.5	8794.2	10109.5	11475.5	11825.4	11812.7	11842.3	11433.3	11003.3	11382.8
65°	7010.9	7103.7	7930.0	9801.8	11408.0	12301.8	12677.0	12757.1	12230.1	11652.5	11909.7
67.5°	5666.0	5788.4	6572.5	8764.7	11079.2	12693.9	13486.5	13570.8	12845.6	11989.8	11863.4
70°	4106.2	4165.3	4822.9	6661.0	9738.6	12478.9	14127.3	14123.1	13047.9	11964.5	11231.0
72.5°	1977.3	2023.6	2592.8	4135.7	6964.6	10590.2	13663.5	13743.5	12769.7	11597.7	9784.9
75°	813.7	860.0	1049.8	1745.4	3655.1	6998.3	11580.9	11770.6	11597.7	10408.8	7656.0
77.5°	505.8	522.7	615.5	902.1	1669.5	3267.3	8107.0	8364.2	9190.5	8338.9	5054.8
80°	379.4	392.1	459.5	632.4	1053.9	1205.8	4026.1	4350.7	5569.1	4785.0	2289.2
82.5°	316.2	320.4	366.7	459.5	716.7	691.4	1290.0	1437.6	2597.0	1825.5	788.4
85°	295.1	303.5	328.9	328.9	455.3	434.2	535.4	560.7	754.6	623.9	274.0
87.5°	151.8	143.3	290.9	257.2	236.1	210.8	227.6	244.5	282.4	299.3	122.2
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°	2575.9	2575.9	2575.9	2575.9	2575.9	2575.9	2575.9	2575.9	2575.9	2575.9	2575.9
2.5°	2567.4	2580.1	2601.2	2622.2	2647.5	2677.1	2693.9	2715.0	2731.9	2723.4	2719.2
5°	2580.1	2601.2	2647.5	2689.7	2740.3	2799.3	2837.3	2879.4	2913.2	2921.5	2909.0
7.5°	2601.2	2639.1	2702.3	2778.2	2845.6	2921.5	2980.6	3039.6	3081.7	3090.2	3090.2
10°	2651.8	2693.9	2778.2	2879.4	2959.5	3039.6	3107.1	3153.5	3191.4	3208.3	3208.3
12.5°	2723.4	2774.0	2875.2	2997.5	3085.9	3161.8	3199.8	3220.9	3237.7	3254.6	3258.8
15°	2807.7	2862.5	2984.8	3115.5	3208.3	3246.2	3246.2	3241.9	3241.9	3250.4	3258.8
17.5°	2892.1	2951.1	3077.5	3216.7	3275.7	3254.6	3225.1	3212.5	3204.0	3199.8	3212.5
20°	2980.6	3039.6	3166.1	3296.8	3279.9	3191.4	3149.3	3119.7	3094.4	3081.7	3098.6
22.5°	3077.5	3132.4	3263.0	3351.6	3225.1	3090.2	3010.1	2963.7	2921.5	2896.3	2913.2
25°	3191.4	3246.2	3372.7	3368.5	3128.2	2938.4	2812.0	2736.1	2689.7	2664.4	2664.4
27.5°	3326.3	3372.7	3494.9	3326.3	2993.3	2736.1	2550.6	2478.9	2466.2	2445.2	2445.2
30°	3465.5	3503.4	3608.8	3229.4	2807.7	2470.4	2268.1	2234.4	2238.6	2217.6	2221.7
32.5°	3608.8	3646.7	3676.2	3085.9	2567.4	2171.1	2036.3	2010.9	2006.7	1989.8	1973.0
35°	3811.1	3865.9	3684.7	2892.1	2276.6	1922.4	1825.5	1800.2	1774.8	1715.8	1715.8
37.5°	4118.9	4177.9	3663.6	2651.8	1977.3	1728.5	1640.0	1606.2	1564.1	1505.1	1484.0
40°	4540.5	4540.5	3617.2	2381.9	1737.0	1572.5	1488.2	1446.0	1399.7	1340.7	1328.0
42.5°	5037.9	4919.9	3545.5	2107.9	1559.9	1467.1	1391.2	1344.9	1290.0	1222.6	1214.1
45°	5619.7	5299.3	3444.4	1863.4	1429.2	1403.9	1357.5	1277.4	1184.7	1113.0	1100.3
47.5°	6184.7	5640.8	3347.4	1690.5	1319.5	1378.5	1340.7	1205.8	1079.2	978.0	965.5
50°	6804.4	5944.4	3233.5	1547.2	1235.2	1361.8	1319.5	1100.3	961.2	889.6	881.1
52.5°	7424.1	6252.1	3111.3	1395.4	1163.6	1328.0	1269.0	1024.5	957.0	860.0	847.4
55°	8077.5	6610.4	2968.0	1226.8	1079.2	1260.6	1201.6	1020.2	986.5	860.0	830.5
57.5°	8714.1	7006.7	2736.1	1062.4	986.5	1159.3	1176.2	994.9	923.3	851.6	817.8
60°	9418.2	7428.3	2352.5	923.3	906.4	1075.0	1142.5	940.1	851.6	826.3	809.5
62.5°	9983.1	7807.7	1838.1	826.3	838.9	1007.6	1100.3	906.4	822.0	801.0	796.8
65°	10227.6	7816.2	1319.5	741.9	771.5	944.4	1058.1	876.9	796.8	788.4	784.2
67.5°	9970.4	7386.1	927.5	661.8	699.8	885.4	1003.4	847.4	771.5	775.7	767.3
70°	9140.0	6479.7	678.7	586.0	632.4	822.0	944.4	809.5	741.9	750.4	737.8
72.5°	7647.5	5050.5	543.8	522.7	577.6	754.6	885.4	767.3	695.6	699.8	674.5
75°	5649.2	3347.4	455.3	468.0	514.3	691.4	809.5	712.5	645.0	628.2	611.3
77.5°	3360.0	1720.1	375.2	409.0	459.5	615.5	725.2	645.0	590.2	560.7	548.1
80°	1387.0	695.6	307.8	345.7	400.5	548.1	640.8	564.9	527.0	497.5	480.6
82.5°	552.3	341.5	244.5	282.4	337.3	476.4	560.7	497.5	459.5	438.4	392.1
85°	210.8	168.6	164.4	198.1	253.0	366.7	463.7	417.4	387.9	333.1	320.4
87.5°	84.3	75.9	75.9	97.0	143.3	231.9	333.1	290.9	303.5	240.3	244.5
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)