

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: P836244

Luminaire Tested: **ARCH3-160-727-U-T2R**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836244
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-160-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1245mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21620 lumens
Efficiency: N/A
Efficacy: 134.3 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 161
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



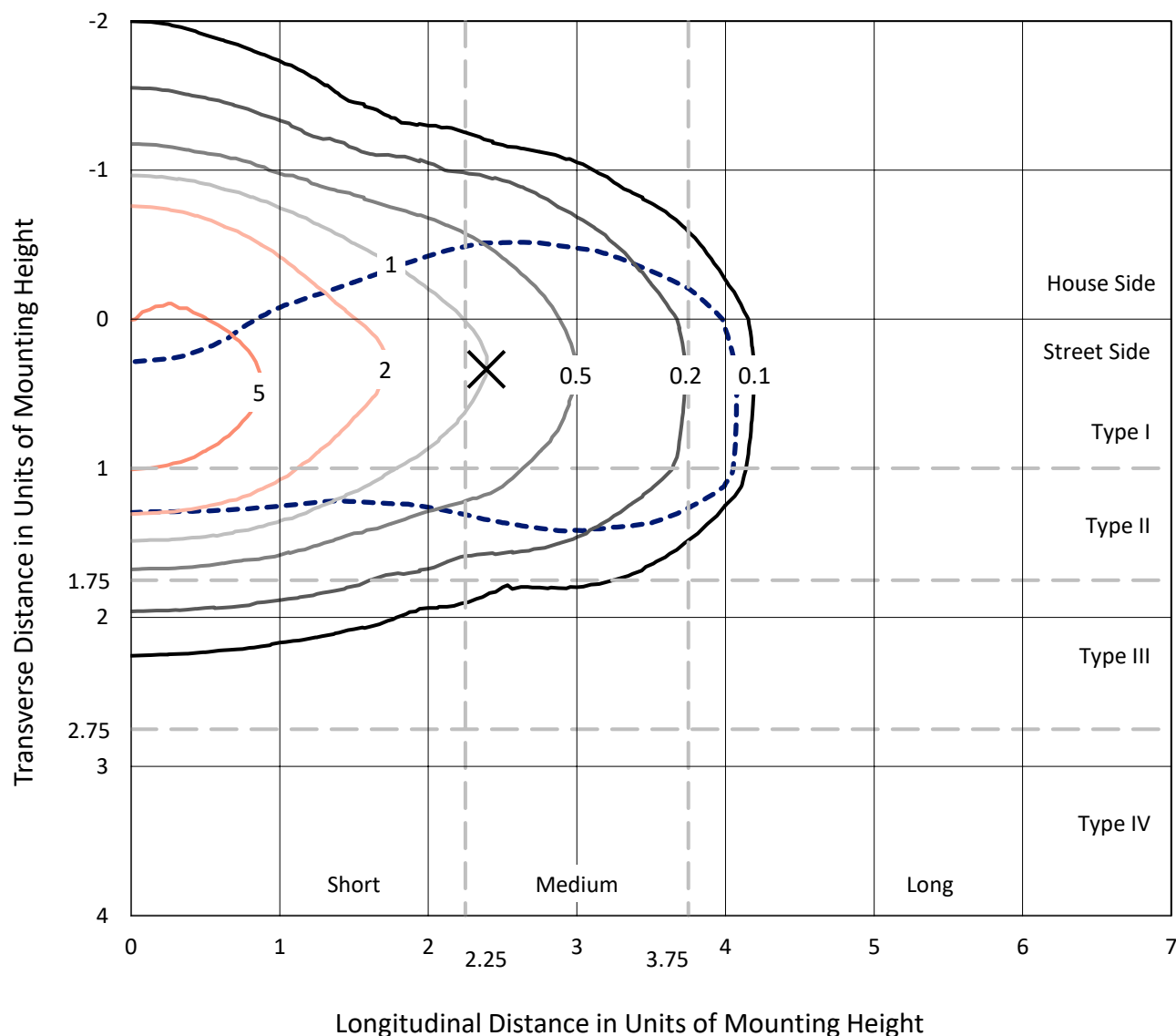
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

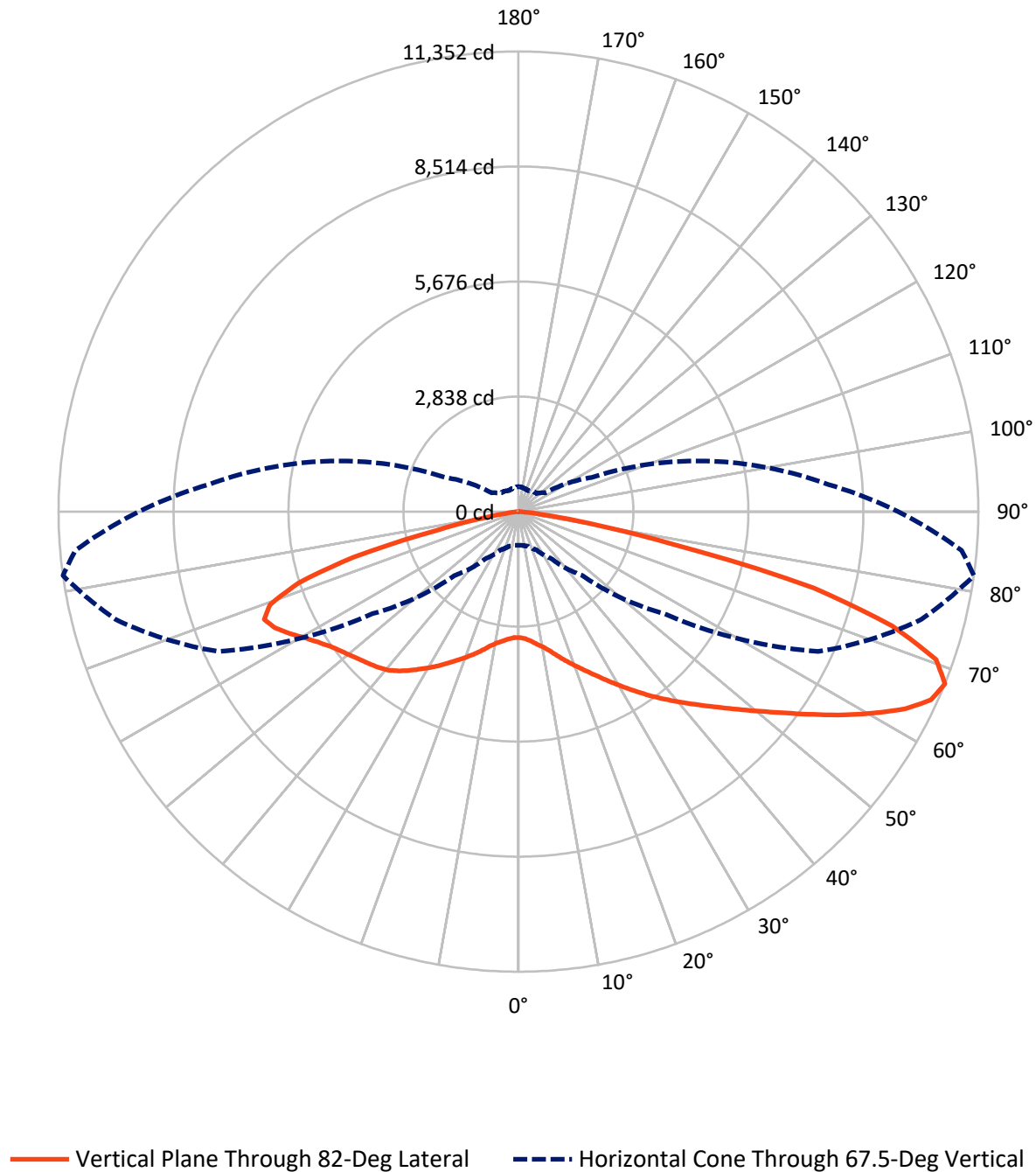
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.5 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6584.2	0.0	6584.2
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	15035.8	0.0	15035.8
	% Fixture	69.5	0.0	69.5
Total	Lumens	21620.0	0.0	21620.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	321.2	1.5
10°-20°	1156.9	5.4
20°-30°	2325.1	10.8
30°-40°	3652.5	16.9
40°-50°	4449.4	20.6
50°-60°	4204.1	19.4
60°-70°	3471.6	16.1
70°-80°	1890.5	8.7
80°-90°	148.6	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°	21620.0	100.0
0°-180°	21620.0	100.0

Coefficient of Utilization



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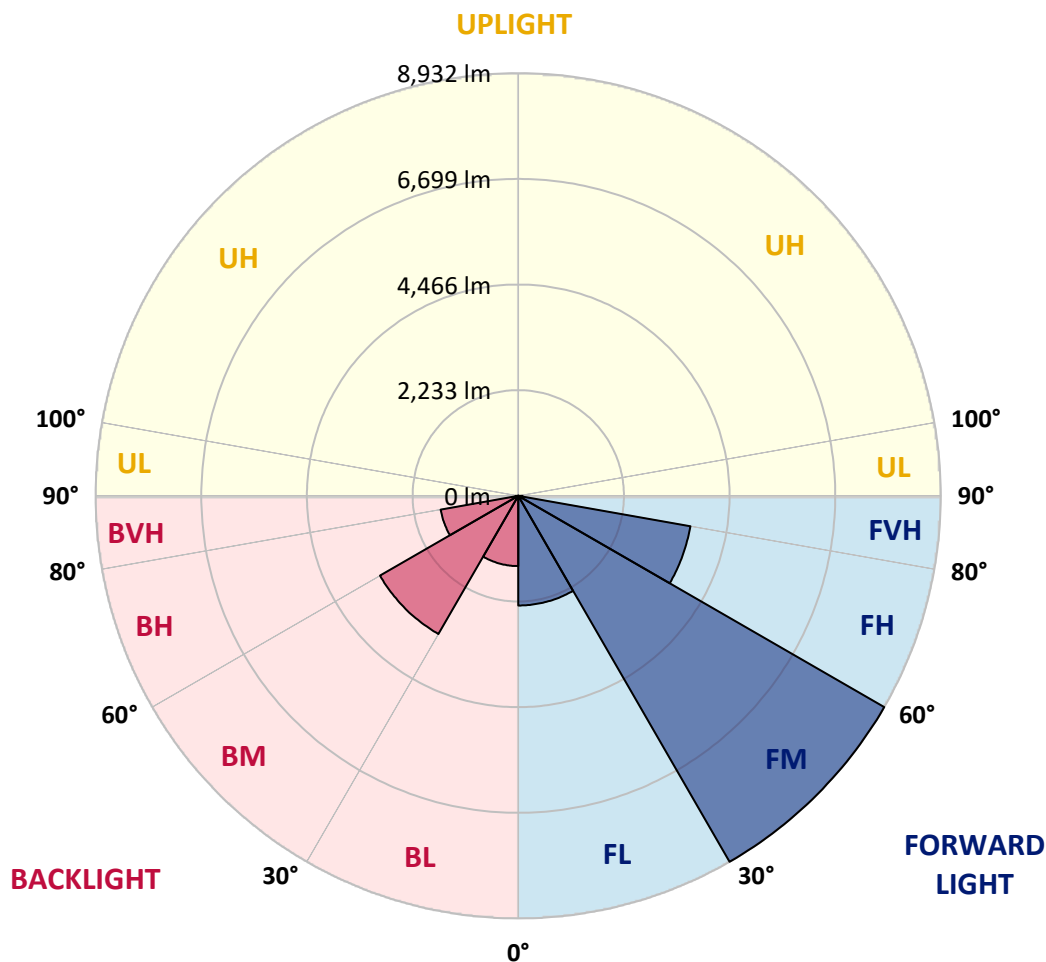
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2318.5	10.7			
FM	(30°-60°)	8932.1	41.3			
FH	(60°-80°)	3695.6	17.1			G2/5000
FVH	(80°-90°)	89.6	0.4			G1/100
BL	(0°-30°)	1484.8	6.9	B3/2500		
BM	(30°-60°)	3373.9	15.6	B3/5000		
BH	(60°-80°)	1666.5	7.7	B3/2500		G3/2500
BVH	(80°-90°)	59.0	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3107.9	3107.9	3107.9	3107.9	3107.9	3107.9	3107.9	3107.9	3107.9	3107.9	3107.9
2.5°	3249.1	3249.1	3274.2	3274.2	3252.3	3217.7	3208.3	3170.6	3136.1	3136.1	3139.3
5°	3559.9	3556.8	3575.6	3550.5	3497.1	3428.1	3381.0	3299.4	3230.3	3208.3	3205.2
7.5°	3939.8	3936.6	3946.0	3905.2	3804.8	3691.8	3597.6	3465.7	3352.7	3305.6	3293.1
10°	4363.6	4360.4	4351.0	4281.9	4147.0	3971.2	3829.9	3647.8	3478.3	3403.0	3387.3
12.5°	4850.2	4843.9	4821.9	4721.4	4536.2	4310.2	4106.1	3870.7	3644.7	3541.1	3506.5
15°	5393.2	5383.8	5343.0	5220.6	4972.6	4686.9	4423.2	4121.8	3845.6	3710.6	3663.5
17.5°	5964.6	5964.6	5901.8	5719.7	5443.5	5088.7	4762.3	4379.3	4055.9	3889.5	3833.0
20°	6545.3	6542.2	6463.7	6244.0	5917.5	5509.4	5095.0	4674.4	4272.5	4071.6	4002.6
22.5°	7157.5	7151.2	7053.9	6802.8	6413.5	5952.0	5468.6	4966.3	4511.1	4269.4	4181.5
25°	7860.7	7851.3	7732.0	7424.3	6962.9	6441.8	5889.2	5308.5	4784.2	4489.1	4385.5
27.5°	8607.8	8595.3	8454.0	8096.1	7590.7	6962.9	6353.9	5704.0	5085.6	4734.0	4617.8
30°	9273.4	9263.9	9110.1	8742.8	8162.1	7480.8	6796.5	6099.6	5402.7	4994.6	4850.2
32.5°	9775.6	9775.6	9637.5	9276.5	8673.8	7976.9	7242.3	6473.1	5732.3	5274.0	5104.4
35°	10080.2	10089.6	9970.3	9681.5	9113.3	8444.6	7703.7	6912.6	6083.9	5572.2	5390.1
37.5°	10124.1	10155.5	10086.4	9891.8	9417.8	8833.9	8155.8	7336.4	6448.0	5873.5	5669.5
40°	9920.1	9942.0	9945.2	9869.8	9543.3	9113.3	8554.5	7785.4	6834.2	6190.6	5955.2
42.5°	9511.9	9527.6	9555.9	9577.9	9452.3	9235.7	8859.0	8202.9	7245.4	6514.0	6237.7
45°	8984.6	8981.4	9028.5	9122.7	9116.4	9166.6	9028.5	8582.7	7672.3	6881.2	6551.6
47.5°	8196.6	8180.9	8347.3	8560.8	8667.5	8902.9	9031.6	8881.0	8137.0	7286.2	6909.5
50°	6962.9	6947.2	7311.3	7813.6	8127.5	8485.4	8859.0	9059.9	8623.5	7741.4	7298.8
52.5°	5462.3	5446.6	5908.1	6787.1	7471.4	7992.5	8510.5	9100.7	9085.0	8250.0	7738.3
55°	4062.2	4049.6	4498.6	5449.7	6557.9	7421.2	8083.6	8994.0	9518.2	8833.9	8271.9
57.5°	2863.0	2856.7	3246.0	4033.9	5383.8	6724.3	7672.3	8786.8	9916.9	9468.0	8874.7
60°	2009.1	1999.7	2282.2	2891.3	4071.6	5672.6	7264.2	8510.5	10215.1	10092.7	9515.1
62.5°	1353.0	1346.7	1547.7	2056.2	2891.3	4366.7	6645.8	8325.3	10384.7	10720.6	10161.8
65°	1026.5	1023.4	1114.4	1393.8	2046.8	3136.1	5663.2	8303.3	10406.6	11191.4	10711.1
67.5°	828.8	831.9	882.1	1042.2	1415.8	2228.9	4391.8	8165.2	10290.5	11351.6	10978.0
70°	678.1	678.1	700.1	806.8	1045.4	1503.7	3067.1	7537.4	9967.1	10934.0	10660.9
72.5°	518.0	521.1	590.2	653.0	788.0	1054.8	1965.2	6237.7	9204.3	9640.7	9433.5
75°	411.2	408.1	448.9	536.8	612.2	753.4	1205.5	4473.4	7832.4	7534.2	7402.4
77.5°	295.1	292.0	323.3	398.7	464.6	533.7	718.9	2257.1	4260.0	3914.7	3817.3
80°	200.9	194.6	222.9	276.3	307.6	313.9	351.6	866.4	1858.4	1751.7	1729.7
82.5°	103.6	103.6	119.3	157.0	160.1	163.2	157.0	279.4	615.3	574.5	549.4
85°	40.8	40.8	43.9	53.4	53.4	56.5	56.5	72.2	65.9	62.8	59.6
87.5°	3.1	3.1	6.3	6.3	9.4	9.4	9.4	12.6	15.7	15.7	15.7
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°	3107.9	3107.9	3107.9	3107.9	3107.9	3107.9	3107.9	3107.9	3107.9	3107.9	3107.9
2.5°	3133.0	3120.4	3079.6	3070.2	3063.9	3054.5	3057.6	3035.7	3026.2	3029.4	3016.8
5°	3189.5	3167.5	3117.3	3095.3	3089.0	3079.6	3089.0	3073.3	3057.6	3063.9	3057.6
7.5°	3268.0	3236.6	3173.8	3151.8	3148.7	3139.3	3151.8	3139.3	3126.7	3133.0	3120.4
10°	3349.6	3308.8	3239.7	3217.7	3217.7	3214.6	3227.2	3208.3	3195.8	3198.9	3192.6
12.5°	3468.9	3415.5	3340.2	3321.3	3311.9	3321.3	3324.5	3299.4	3277.4	3280.5	3271.1
15°	3613.3	3553.6	3472.0	3443.8	3437.5	3434.3	3421.8	3390.4	3362.1	3359.0	3349.6
17.5°	3770.2	3694.9	3597.6	3569.3	3541.1	3531.7	3500.3	3459.5	3415.5	3415.5	3403.0
20°	3920.9	3836.2	3720.0	3679.2	3638.4	3600.7	3547.4	3481.4	3424.9	3415.5	3403.0
22.5°	4084.2	3983.7	3848.7	3789.1	3716.9	3641.5	3550.5	3462.6	3390.4	3374.7	3365.3
25°	4266.2	4140.7	3980.6	3892.7	3776.5	3660.4	3525.4	3412.4	3327.6	3302.5	3296.2
27.5°	4467.2	4316.5	4121.8	3993.1	3823.6	3641.5	3468.9	3333.9	3230.3	3198.9	3189.5
30°	4671.2	4492.3	4250.6	4062.2	3823.6	3581.9	3365.3	3208.3	3089.0	3045.1	3038.8
32.5°	4875.3	4674.4	4366.7	4099.9	3785.9	3481.4	3230.3	3045.1	2910.1	2856.7	2869.3
35°	5120.1	4875.3	4473.4	4115.6	3723.2	3359.0	3076.5	2859.9	2721.7	2674.6	2684.1
37.5°	5374.4	5076.2	4558.2	4103.0	3635.3	3220.9	2903.8	2693.5	2520.8	2439.2	2448.6
40°	5594.2	5258.3	4617.8	4059.1	3522.2	3063.9	2734.3	2458.0	2219.5	2141.0	2131.6
42.5°	5801.3	5393.2	4649.2	3993.1	3393.5	2881.8	2492.6	2137.8	1899.3	1801.9	1805.1
45°	6018.0	5525.1	4636.7	3905.2	3233.4	2668.4	2181.8	1823.9	1613.6	1525.7	1528.8
47.5°	6266.0	5666.4	4624.1	3811.1	3038.8	2392.1	1883.6	1547.7	1365.6	1302.8	1296.5
50°	6529.7	5823.3	4608.4	3694.9	2822.2	2084.5	1588.5	1290.2	1136.4	1095.6	1086.2
52.5°	6827.9	5992.8	4599.0	3556.8	2561.6	1758.0	1324.8	1064.2	960.6	932.4	929.2
55°	7185.8	6190.6	4611.6	3390.4	2247.7	1450.3	1101.9	916.7	847.6	831.9	828.8
57.5°	7622.1	6444.9	4649.2	3195.8	1918.1	1183.5	938.6	825.6	781.7	769.1	769.1
60°	8096.1	6733.7	4718.3	2976.0	1588.5	976.3	831.9	753.4	734.6	750.3	750.3
62.5°	8607.8	7072.7	4840.7	2709.2	1280.8	825.6	747.1	693.8	681.2	712.6	715.8
65°	9081.9	7402.4	4919.2	2389.0	1017.1	715.8	681.2	634.1	640.4	671.8	668.7
67.5°	9373.8	7675.5	4809.3	1987.1	806.8	634.1	612.2	571.3	587.0	612.2	615.3
70°	9194.9	7521.7	4266.2	1500.6	631.0	552.5	536.8	511.7	524.3	555.6	568.2
72.5°	8319.0	6736.8	3318.2	1014.0	508.6	464.6	470.9	458.3	474.0	502.3	530.5
75°	6752.5	5091.9	2225.7	649.8	401.8	395.5	405.0	395.5	401.8	430.1	445.8
77.5°	3525.4	2483.2	1108.2	405.0	298.2	307.6	323.3	326.5	345.3	351.6	357.9
80°	1645.0	1117.6	461.5	226.0	197.8	216.6	248.0	251.1	257.4	266.8	270.0
82.5°	536.8	335.9	213.5	122.4	113.0	122.4	160.1	191.5	194.6	213.5	213.5
85°	56.5	34.5	47.1	50.2	43.9	53.4	72.2	69.1	31.4	18.8	18.8
87.5°	15.7	12.6	15.7	15.7	12.6	12.6	9.4	3.1	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)