

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: P836100

Luminaire Tested: **ARCH3-140-727-U-T2R**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836100
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: ARCH3-140-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1110mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19857 lumens
Efficiency: N/A
Efficacy: 139.3 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): 142.5
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

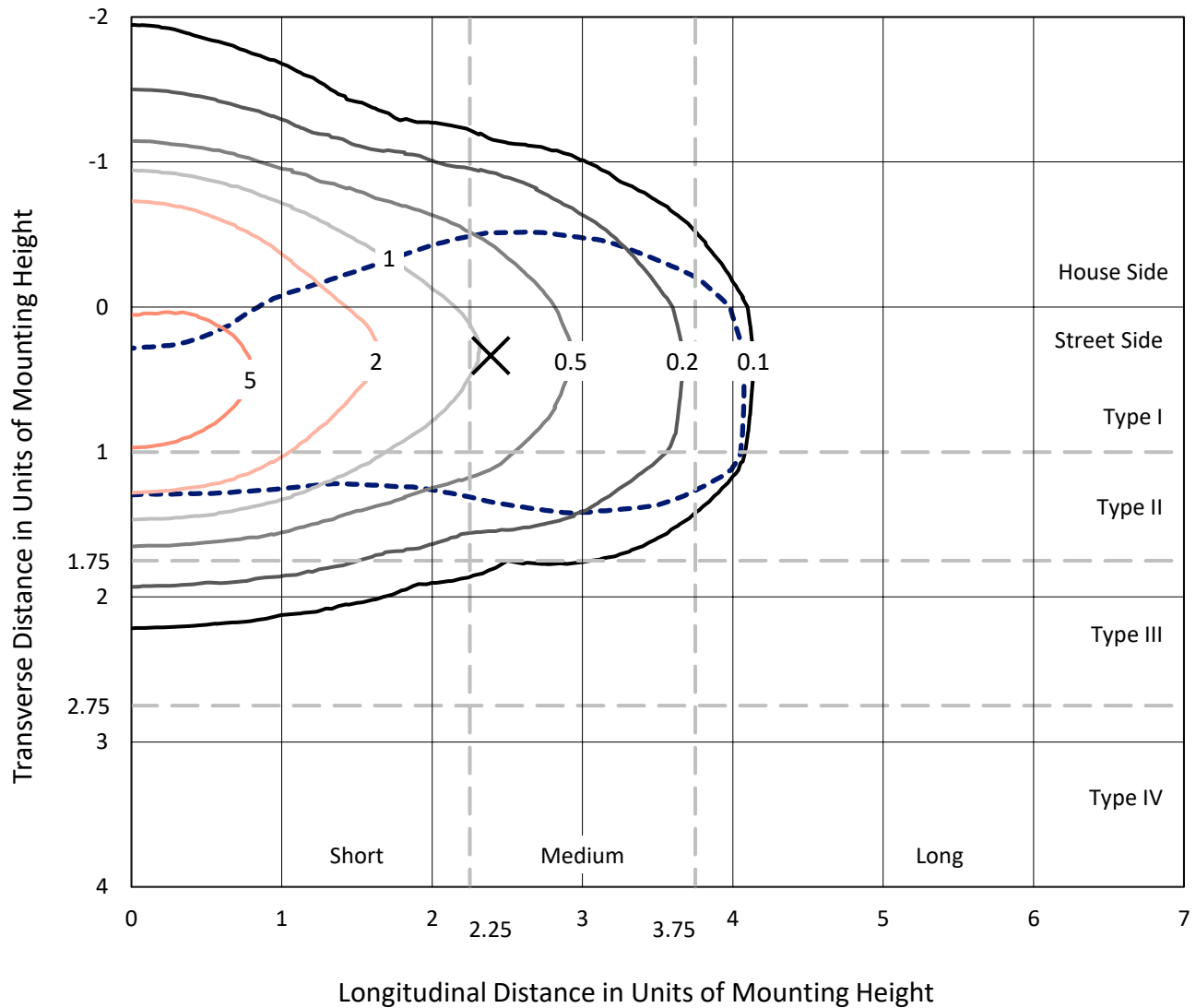


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd

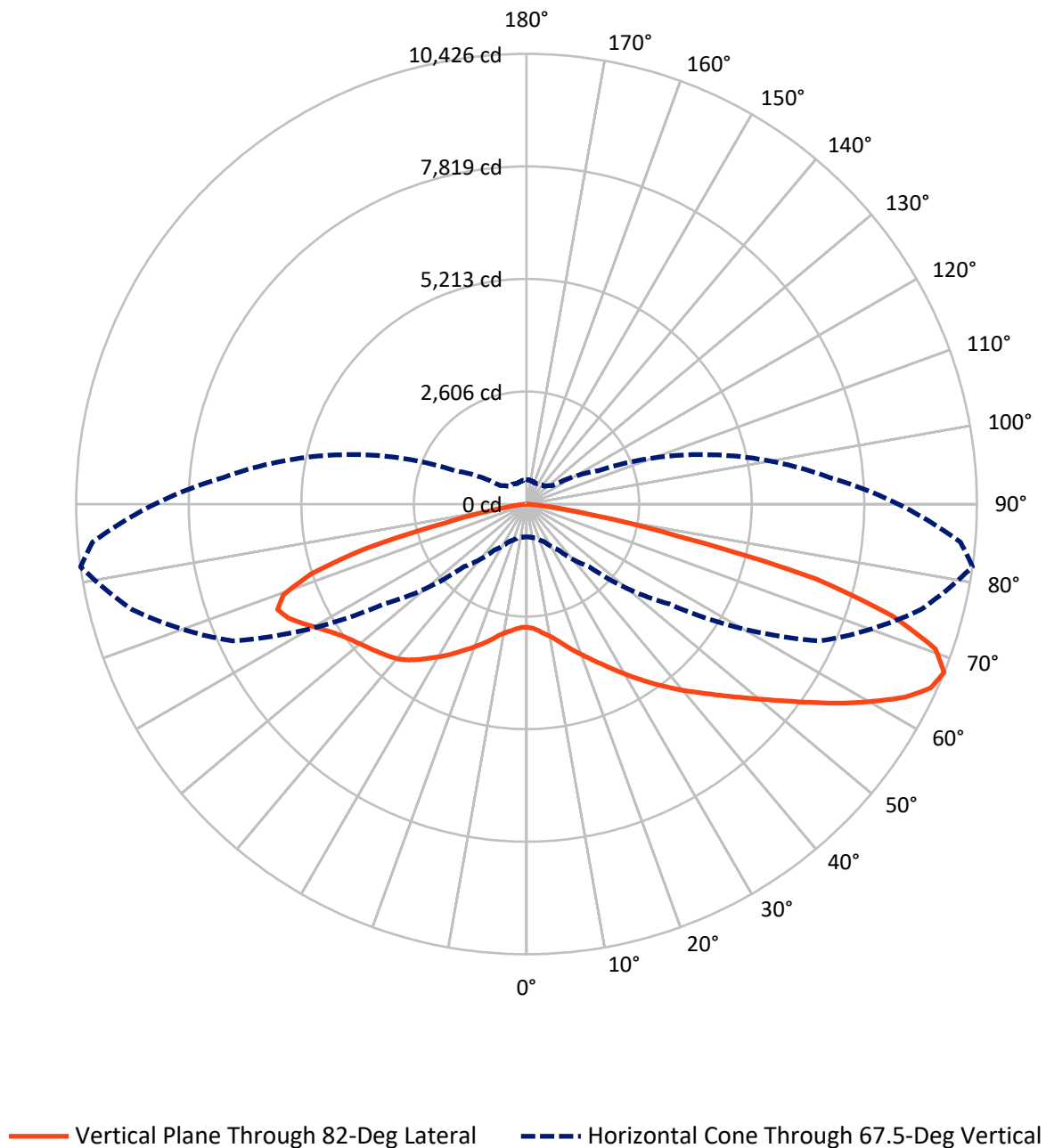


Based on 25 foot mounting height. Maximum calculated value = 8.8 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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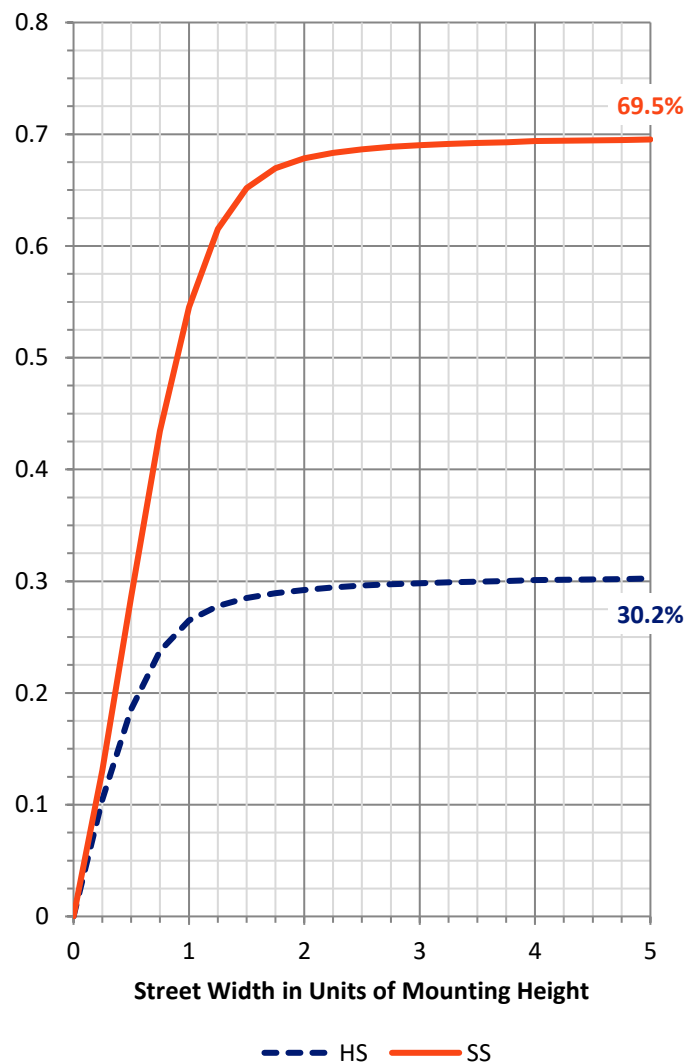
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6047.3	0.0	6047.3
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	13809.7	0.0	13809.7
	% Fixture	69.5	0.0	69.5
Total	Lumens	19857.0	0.0	19857.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	295.0	1.5
10°-20°	1062.6	5.4
20°-30°	2135.5	10.8
30°-40°	3354.6	16.9
40°-50°	4086.6	20.6
50°-60°	3861.3	19.4
60°-70°	3188.6	16.1
70°-80°	1736.3	8.7
80°-90°	136.5	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°	19857.0	100.0
0°-180°	19857.0	100.0

Coefficient of Utilization



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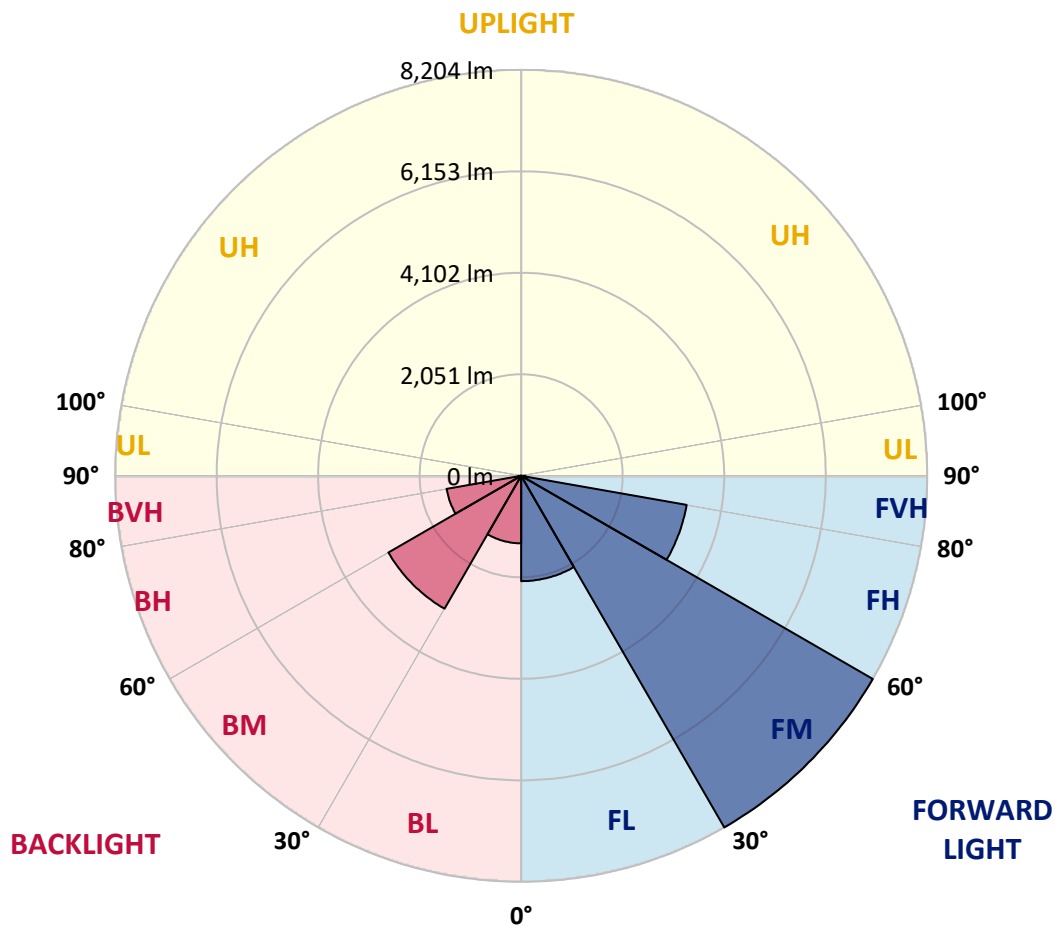
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2129.4	10.7			
FM	(30°-60°)	8203.8	41.3			
FH	(60°-80°)	3394.3	17.1			G2/5000
FVH	(80°-90°)	82.3	0.4			G1/100
BL	(0°-30°)	1363.7	6.9	B3/2500		
BM	(30°-60°)	3098.7	15.6	B3/5000		
BH	(60°-80°)	1530.6	7.7	B3/2500		G3/2500
BVH	(80°-90°)	54.2	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°	2854.4	2854.4	2854.4	2854.4	2854.4	2854.4	2854.4	2854.4	2854.4	2854.4	2854.4
2.5°	2984.2	2984.2	3007.2	3007.2	2987.1	2955.3	2946.7	2912.1	2880.4	2880.4	2883.3
5°	3269.6	3266.7	3284.0	3261.0	3212.0	3148.5	3105.3	3030.3	2966.9	2946.7	2943.8
7.5°	3618.5	3615.6	3624.3	3586.8	3494.5	3390.7	3304.2	3183.1	3079.3	3036.1	3024.5
10°	4007.7	4004.9	3996.2	3932.8	3808.8	3647.3	3517.6	3350.4	3194.7	3125.5	3111.0
12.5°	4454.6	4448.9	4428.7	4336.4	4166.3	3958.7	3771.3	3555.1	3347.5	3252.3	3220.6
15°	4953.5	4944.8	4907.3	4794.9	4567.1	4304.7	4062.5	3785.7	3532.0	3408.0	3364.8
17.5°	5478.2	5478.2	5420.5	5253.3	4999.6	4673.8	4373.9	4022.2	3725.2	3572.4	3520.5
20°	6011.6	6008.7	5936.6	5734.8	5435.0	5060.1	4679.5	4293.2	3924.1	3739.6	3676.2
22.5°	6573.8	6568.1	6478.7	6248.0	5890.5	5466.7	5022.6	4561.3	4143.3	3921.2	3840.5
25°	7219.7	7211.0	7101.5	6818.9	6395.1	5916.5	5409.0	4875.6	4394.1	4123.1	4027.9
27.5°	7905.9	7894.4	7764.6	7435.9	6971.7	6395.1	5835.7	5238.9	4670.9	4348.0	4241.3
30°	8517.2	8508.5	8367.2	8029.9	7496.5	6870.8	6242.3	5602.2	4962.1	4587.3	4454.6
32.5°	8978.5	8978.5	8851.6	8520.1	7966.5	7326.4	6651.7	5945.3	5264.8	4843.9	4688.2
35°	9258.2	9266.8	9157.3	8892.0	8370.1	7756.0	7075.5	6349.0	5587.8	5117.8	4950.6
37.5°	9298.5	9327.4	9263.9	9085.2	8649.8	8113.5	7490.7	6738.2	5922.2	5394.6	5207.2
40°	9111.1	9131.3	9134.2	9065.0	8765.1	8370.1	7856.9	7150.5	6276.9	5685.8	5469.6
42.5°	8736.3	8750.7	8776.7	8796.8	8681.5	8482.6	8136.6	7534.0	6654.6	5982.8	5729.0
45°	8251.9	8249.0	8292.3	8378.8	8373.0	8419.1	8292.3	7882.8	7046.7	6320.1	6017.4
47.5°	7528.2	7513.8	7666.6	7862.7	7960.7	8176.9	8295.2	8156.8	7473.4	6692.1	6346.1
50°	6395.1	6380.7	6715.1	7176.4	7464.8	7793.5	8136.6	8321.1	7920.3	7110.1	6703.6
52.5°	5016.9	5002.5	5426.3	6233.6	6862.2	7340.8	7816.5	8358.6	8344.2	7577.2	7107.3
55°	3730.9	3719.4	4131.7	5005.4	6023.1	6816.0	7424.4	8260.6	8742.1	8113.5	7597.4
57.5°	2629.5	2623.8	2981.3	3705.0	4944.8	6176.0	7046.7	8070.3	9108.2	8695.9	8151.0
60°	1845.3	1836.6	2096.1	2655.5	3739.6	5210.1	6671.9	7816.5	9382.1	9269.7	8739.2
62.5°	1242.7	1236.9	1421.5	1888.5	2655.5	4010.6	6103.9	7646.4	9537.8	9846.4	9333.1
65°	942.8	939.9	1023.6	1280.2	1879.9	2880.4	5201.4	7626.2	9558.0	10278.8	9837.7
67.5°	761.2	764.1	810.2	957.2	1300.4	2047.1	4033.7	7499.4	9451.3	10425.9	10082.8
70°	622.8	622.8	643.0	741.0	960.1	1381.1	2817.0	6922.7	9154.4	10042.4	9791.6
72.5°	475.7	478.6	542.1	599.7	723.7	968.8	1804.9	5729.0	8453.7	8854.5	8664.2
75°	377.7	374.8	412.3	493.0	562.2	692.0	1107.2	4108.7	7193.7	6919.8	6798.7
77.5°	271.0	268.1	297.0	366.2	426.7	490.2	660.3	2073.1	3912.6	3595.4	3506.1
80°	184.5	178.8	204.7	253.7	282.6	288.3	322.9	795.8	1706.9	1608.9	1588.7
82.5°	95.1	95.1	109.6	144.2	147.0	149.9	144.2	256.6	565.1	527.6	504.6
85°	37.5	37.5	40.4	49.0	49.0	51.9	51.9	66.3	60.5	57.7	54.8
87.5°	2.9	2.9	5.8	5.8	8.6	8.6	8.6	11.5	14.4	14.4	14.4
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°	2854.4	2854.4	2854.4	2854.4	2854.4	2854.4	2854.4	2854.4	2854.4	2854.4	2854.4
2.5°	2877.5	2866.0	2828.5	2819.8	2814.1	2805.4	2808.3	2788.1	2779.5	2782.4	2770.8
5°	2929.4	2909.2	2863.1	2842.9	2837.1	2828.5	2837.1	2822.7	2808.3	2814.1	2808.3
7.5°	3001.5	2972.6	2915.0	2894.8	2891.9	2883.3	2894.8	2883.3	2871.7	2877.5	2866.0
10°	3076.4	3039.0	2975.5	2955.3	2955.3	2952.5	2964.0	2946.7	2935.2	2938.0	2932.3
12.5°	3186.0	3137.0	3067.8	3050.5	3041.8	3050.5	3053.4	3030.3	3010.1	3013.0	3004.4
15°	3318.6	3263.9	3188.9	3162.9	3157.2	3154.3	3142.8	3113.9	3088.0	3085.1	3076.4
17.5°	3462.8	3393.6	3304.2	3278.3	3252.3	3243.7	3214.8	3177.4	3137.0	3137.0	3125.5
20°	3601.2	3523.4	3416.7	3379.2	3341.7	3307.1	3258.1	3197.5	3145.6	3137.0	3125.5
22.5°	3751.1	3658.9	3534.9	3480.1	3413.8	3344.6	3261.0	3180.2	3113.9	3099.5	3090.9
25°	3918.4	3803.0	3656.0	3575.3	3468.6	3361.9	3237.9	3134.1	3056.3	3033.2	3027.4
27.5°	4102.9	3964.5	3785.7	3667.5	3511.8	3344.6	3186.0	3062.0	2966.9	2938.0	2929.4
30°	4290.3	4126.0	3903.9	3730.9	3511.8	3289.8	3090.9	2946.7	2837.1	2796.8	2791.0
32.5°	4477.7	4293.2	4010.6	3765.5	3477.2	3197.5	2966.9	2796.8	2672.8	2623.8	2635.3
35°	4702.6	4477.7	4108.7	3780.0	3419.6	3085.1	2825.6	2626.7	2499.8	2456.5	2465.2
37.5°	4936.2	4662.2	4186.5	3768.4	3338.8	2958.2	2667.0	2473.8	2315.3	2240.3	2248.9
40°	5138.0	4829.5	4241.3	3728.1	3235.0	2814.1	2511.3	2257.6	2038.5	1966.4	1957.7
42.5°	5328.3	4953.5	4270.1	3667.5	3116.8	2646.8	2289.3	1963.5	1744.4	1655.0	1657.9
45°	5527.2	5074.5	4258.6	3586.8	2969.8	2450.8	2003.9	1675.2	1482.0	1401.3	1404.2
47.5°	5755.0	5204.3	4247.1	3500.3	2791.0	2197.0	1730.0	1421.5	1254.2	1196.6	1190.8
50°	5997.2	5348.5	4232.6	3393.6	2592.1	1914.5	1458.9	1185.0	1043.7	1006.3	997.6
52.5°	6271.1	5504.2	4224.0	3266.7	2352.7	1614.6	1216.7	977.4	882.3	856.3	853.4
55°	6599.8	5685.8	4235.5	3113.9	2064.4	1332.1	1012.0	841.9	778.5	764.1	761.2
57.5°	7000.6	5919.3	4270.1	2935.2	1761.7	1087.0	862.1	758.3	717.9	706.4	706.4
60°	7435.9	6184.6	4333.5	2733.3	1458.9	896.7	764.1	692.0	674.7	689.1	689.1
62.5°	7905.9	6496.0	4446.0	2488.3	1176.4	758.3	686.2	637.2	625.7	654.5	657.4
65°	8341.3	6798.7	4518.1	2194.2	934.2	657.4	625.7	582.4	588.2	617.0	614.1
67.5°	8609.4	7049.6	4417.2	1825.1	741.0	582.4	562.2	524.8	539.2	562.2	565.1
70°	8445.1	6908.3	3918.4	1378.2	579.5	507.5	493.0	470.0	481.5	510.3	521.9
72.5°	7640.7	6187.5	3047.6	931.3	467.1	426.7	432.5	421.0	435.4	461.3	487.3
75°	6201.9	4676.7	2044.2	596.8	369.1	363.3	371.9	363.3	369.1	395.0	409.4
77.5°	3237.9	2280.7	1017.8	371.9	273.9	282.6	297.0	299.9	317.2	322.9	328.7
80°	1510.8	1026.4	423.8	207.6	181.6	198.9	227.8	230.7	236.4	245.1	248.0
82.5°	493.0	308.5	196.1	112.4	103.8	112.4	147.0	175.9	178.8	196.1	196.1
85°	51.9	31.7	43.2	46.1	40.4	49.0	66.3	63.4	28.8	17.3	17.3
87.5°	14.4	11.5	14.4	14.4	11.5	11.5	8.6	2.9	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)