

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: P841011

Luminaire Tested: **ARCH4-120-727-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841011
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-120-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1000mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19868 lumens
Efficiency: N/A
Efficacy: 162.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 122
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



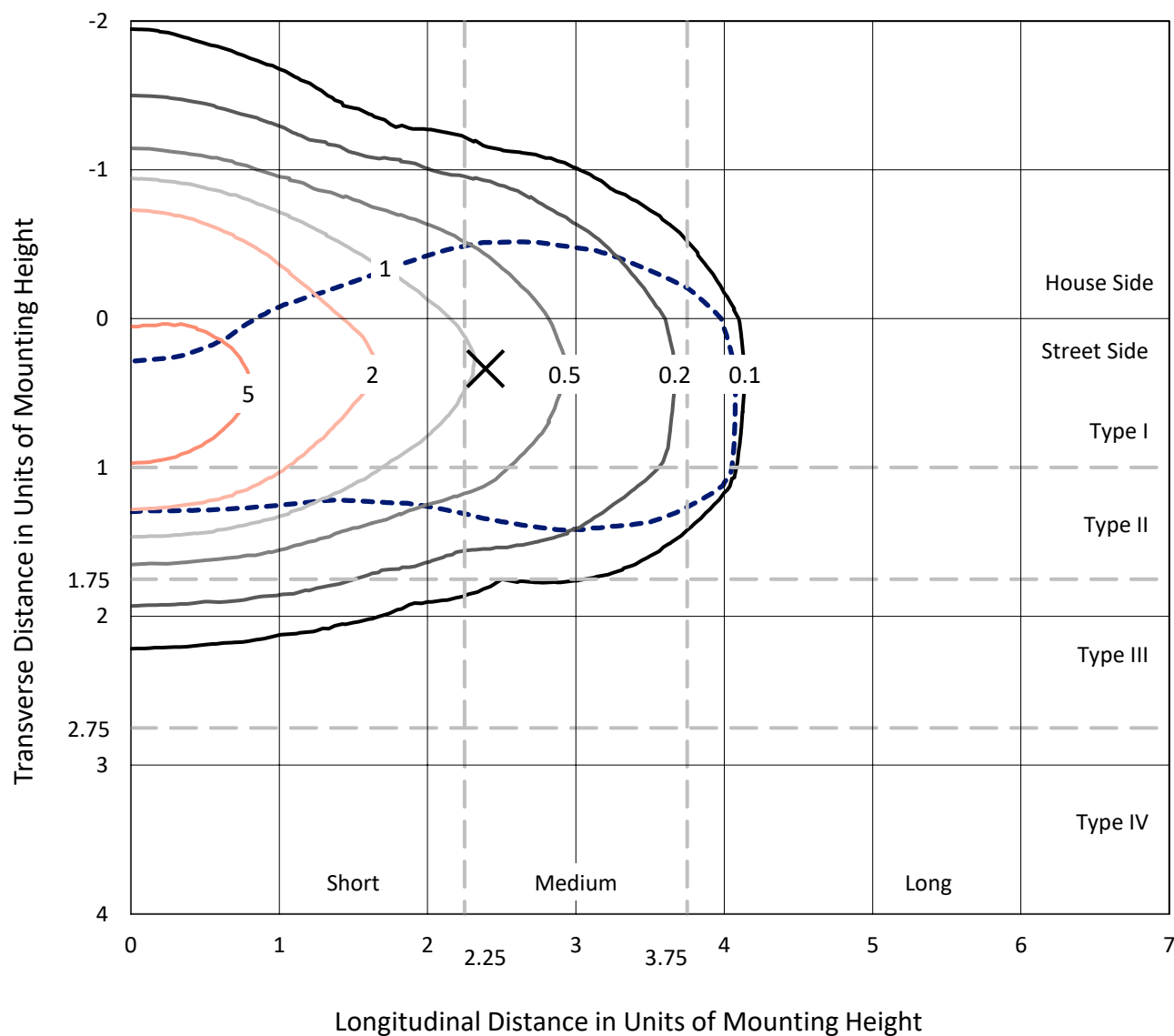
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

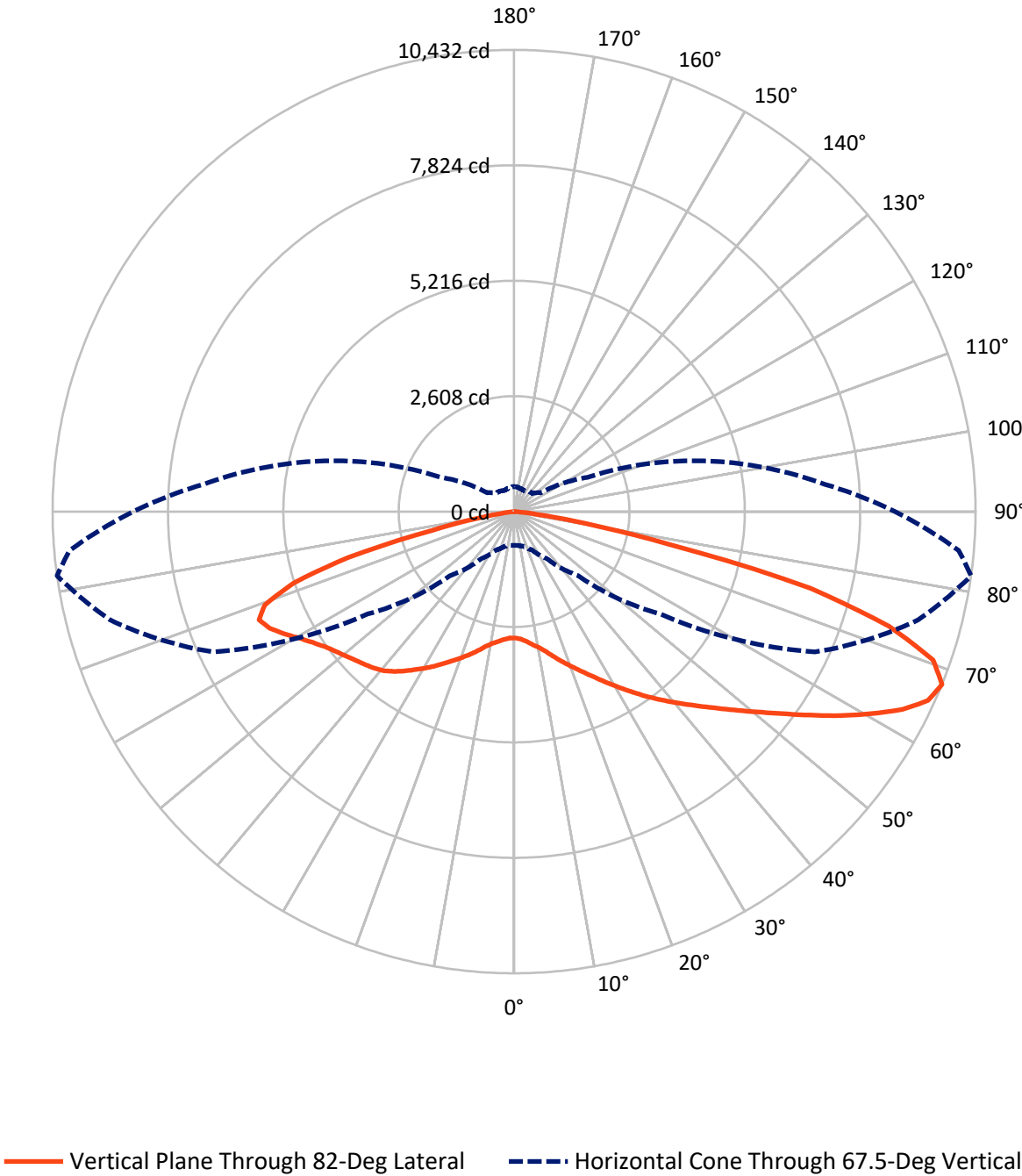
--- 1/2 Max cd



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	6050.6	0.0	6050.6
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	13817.4	0.0	13817.4
	% Fixture	69.5	0.0	69.5
Total	Lumens	19868.0	0.0	19868.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	295.2	1.5
10°-20°	1063.2	5.4
20°-30°	2136.7	10.8
30°-40°	3356.5	16.9
40°-50°	4088.8	20.6
50°-60°	3863.5	19.4
60°-70°	3190.3	16.1
70°-80°	1737.3	8.7
80°-90°	136.6	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°	19868.0	100.0
0°-180°	19868.0	100.0

Coefficient of Utilization



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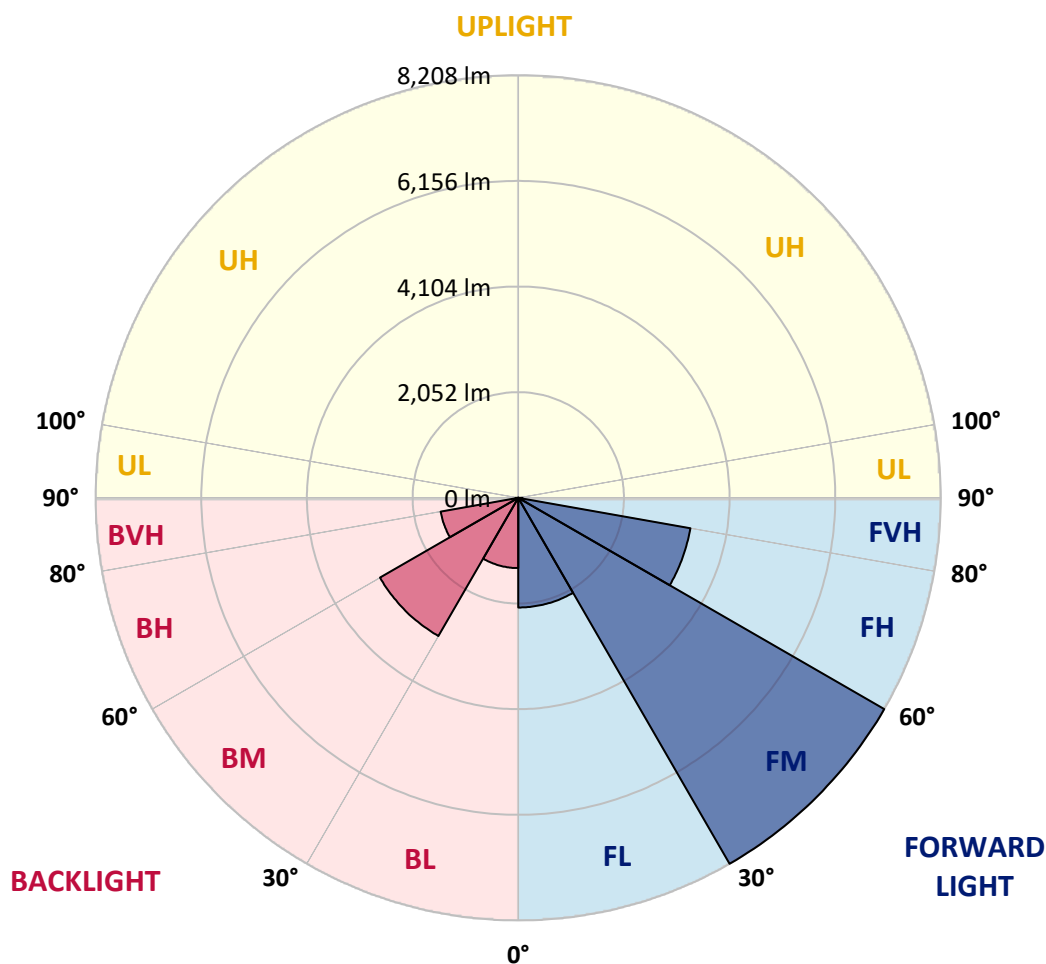
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2130.6	10.7			
FM	(30°-60°)	8208.3	41.3			
FH	(60°-80°)	3396.2	17.1			G2/5000
FVH	(80°-90°)	82.3	0.4			G1/100
BL	(0°-30°)	1364.5	6.9	B3/2500		
BM	(30°-60°)	3100.5	15.6	B3/5000		
BH	(60°-80°)	1531.4	7.7	B3/2500		G3/2500
BVH	(80°-90°)	54.3	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°	2856.0	2856.0	2856.0	2856.0	2856.0	2856.0	2856.0	2856.0	2856.0	2856.0	2856.0
2.5°	2985.8	2985.8	3008.9	3008.9	2988.7	2957.0	2948.3	2913.7	2882.0	2882.0	2884.9
5°	3271.4	3268.6	3285.9	3262.8	3213.7	3150.3	3107.0	3032.0	2968.5	2948.3	2945.4
7.5°	3620.5	3617.6	3626.3	3588.8	3496.5	3392.6	3306.1	3184.9	3081.0	3037.8	3026.2
10°	4010.0	4007.1	3998.4	3935.0	3810.9	3649.4	3519.5	3352.2	3196.4	3127.2	3112.8
12.5°	4457.1	4451.3	4431.2	4338.8	4168.6	3960.9	3773.4	3557.0	3349.3	3254.1	3222.4
15°	4956.2	4947.5	4910.0	4797.5	4569.6	4307.1	4064.8	3787.8	3534.0	3409.9	3366.6
17.5°	5481.2	5481.2	5423.5	5256.2	5002.4	4676.4	4376.3	4024.4	3727.2	3574.3	3522.4
20°	6014.9	6012.1	5939.9	5738.0	5438.0	5062.9	4682.1	4295.6	3926.3	3741.7	3678.2
22.5°	6577.5	6571.7	6482.3	6251.5	5893.8	5469.7	5025.4	4563.9	4145.5	3923.4	3842.6
25°	7223.7	7215.0	7105.4	6822.7	6398.6	5919.7	5412.0	4878.3	4396.5	4125.4	4030.2
27.5°	7910.3	7898.8	7768.9	7440.1	6975.6	6398.6	5839.0	5241.8	4673.5	4350.4	4243.6
30°	8521.9	8513.2	8371.9	8034.3	7500.6	6874.6	6245.7	5605.3	4964.8	4589.8	4457.1
32.5°	8983.5	8983.5	8856.5	8524.8	7970.9	7330.4	6655.4	5948.6	5267.8	4846.6	4690.8
35°	9263.3	9272.0	9162.3	8896.9	8374.8	7760.3	7079.5	6352.5	5590.9	5120.6	4953.3
37.5°	9303.7	9332.5	9269.1	9090.2	8654.6	8118.0	7494.9	6741.9	5925.5	5397.6	5210.1
40°	9116.2	9136.4	9139.2	9070.0	8770.0	8374.8	7861.3	7154.5	6280.3	5689.0	5472.6
42.5°	8741.1	8755.6	8781.5	8801.7	8686.3	8487.3	8141.1	7538.1	6658.3	5986.1	5732.2
45°	8256.5	8253.6	8296.9	8383.4	8377.6	8423.8	8296.9	7887.2	7050.6	6323.6	6020.7
47.5°	7532.4	7518.0	7670.9	7867.0	7965.1	8181.5	8299.8	8161.3	7477.6	6695.8	6349.6
50°	6398.6	6384.2	6718.8	7180.4	7468.9	7797.8	8141.1	8325.7	7924.7	7114.1	6707.3
52.5°	5019.7	5005.2	5429.3	6237.1	6866.0	7344.9	7820.9	8363.2	8348.8	7581.4	7111.2
55°	3733.0	3721.5	4134.0	5008.1	6026.5	6819.8	7428.5	8265.1	8746.9	8118.0	7601.6
57.5°	2631.0	2625.2	2982.9	3707.0	4947.5	6179.4	7050.6	8074.7	9113.3	8700.7	8155.5
60°	1846.3	1837.7	2097.3	2657.0	3741.7	5212.9	6675.6	7820.9	9387.3	9274.8	8744.0
62.5°	1243.4	1237.6	1422.2	1889.6	2657.0	4012.8	6107.3	7650.7	9543.1	9851.8	9338.3
65°	943.4	940.5	1024.1	1280.9	1880.9	2882.0	5204.3	7630.5	9563.3	10284.5	9843.2
67.5°	761.6	764.5	810.6	957.8	1301.1	2048.3	4035.9	7503.5	9456.6	10431.7	10088.4
70°	623.1	623.1	643.3	741.4	960.7	1381.8	2818.5	6926.6	9159.4	10048.0	9797.0
72.5°	476.0	478.9	542.4	600.1	724.1	969.3	1805.9	5732.2	8458.4	8859.4	8669.0
75°	377.9	375.0	412.5	493.3	562.5	692.4	1107.8	4110.9	7197.7	6923.7	6802.5
77.5°	271.2	268.3	297.1	366.4	427.0	490.4	660.6	2074.2	3914.8	3597.4	3508.0
80°	184.6	178.9	204.8	253.9	282.7	288.5	323.1	796.2	1707.8	1609.8	1589.6
82.5°	95.2	95.2	109.6	144.2	147.1	150.0	144.2	256.8	565.4	527.9	504.9
85°	37.5	37.5	40.4	49.0	49.0	51.9	51.9	66.4	60.6	57.7	54.8
87.5°	2.9	2.9	5.8	5.8	8.7	8.7	8.7	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°	2856.0	2856.0	2856.0	2856.0	2856.0	2856.0	2856.0	2856.0	2856.0	2856.0	2856.0
2.5°	2879.1	2867.6	2830.1	2821.4	2815.6	2807.0	2809.9	2789.7	2781.0	2783.9	2772.4
5°	2931.0	2910.8	2864.7	2844.5	2838.7	2830.1	2838.7	2824.3	2809.9	2815.6	2809.9
7.5°	3003.1	2974.3	2916.6	2896.4	2893.5	2884.9	2896.4	2884.9	2873.3	2879.1	2867.6
10°	3078.1	3040.6	2977.2	2957.0	2957.0	2954.1	2965.6	2948.3	2936.8	2939.7	2933.9
12.5°	3187.8	3138.7	3069.5	3052.2	3043.5	3052.2	3055.1	3032.0	3011.8	3014.7	3006.0
15°	3320.5	3265.7	3190.7	3164.7	3158.9	3156.0	3144.5	3115.7	3089.7	3086.8	3078.1
17.5°	3464.7	3395.5	3306.1	3280.1	3254.1	3245.5	3216.6	3179.1	3138.7	3138.7	3127.2
20°	3603.2	3525.3	3418.6	3381.1	3343.6	3308.9	3259.9	3199.3	3147.4	3138.7	3127.2
22.5°	3753.2	3660.9	3536.8	3482.0	3415.7	3346.4	3262.8	3182.0	3115.7	3101.2	3092.6
25°	3920.5	3805.1	3658.0	3577.2	3470.5	3363.8	3239.7	3135.8	3058.0	3034.9	3029.1
27.5°	4105.2	3966.7	3787.8	3669.5	3513.8	3346.4	3187.8	3063.7	2968.5	2939.7	2931.0
30°	4292.7	4128.2	3906.1	3733.0	3513.8	3291.6	3092.6	2948.3	2838.7	2798.3	2792.5
32.5°	4480.2	4295.6	4012.8	3767.6	3479.1	3199.3	2968.5	2798.3	2674.3	2625.2	2636.8
35°	4705.2	4480.2	4110.9	3782.1	3421.4	3086.8	2827.2	2628.1	2501.2	2457.9	2466.6
37.5°	4938.9	4664.8	4188.8	3770.5	3340.7	2959.9	2668.5	2475.2	2316.5	2241.5	2250.2
40°	5140.8	4832.1	4243.6	3730.1	3236.8	2815.6	2512.7	2258.8	2039.6	1967.5	1958.8
42.5°	5331.2	4956.2	4272.5	3669.5	3118.5	2648.3	2290.6	1964.6	1745.3	1655.9	1658.8
45°	5530.3	5077.4	4260.9	3588.8	2971.4	2452.1	2005.0	1676.1	1482.8	1402.0	1404.9
47.5°	5758.2	5207.2	4249.4	3502.2	2792.5	2198.3	1730.9	1422.2	1254.9	1197.2	1191.4
50°	6000.5	5351.4	4235.0	3395.5	2593.5	1915.5	1459.7	1185.7	1044.3	1006.8	998.2
52.5°	6274.6	5507.2	4226.3	3268.6	2354.0	1615.5	1217.4	978.0	882.8	856.8	853.9
55°	6603.5	5689.0	4237.9	3115.7	2065.6	1332.8	1012.6	842.4	778.9	764.5	761.6
57.5°	7004.4	5922.6	4272.5	2936.8	1762.7	1087.6	862.6	758.7	718.3	706.8	706.8
60°	7440.1	6188.0	4335.9	2734.9	1459.7	897.2	764.5	692.4	675.1	689.5	689.5
62.5°	7910.3	6499.6	4448.5	2489.6	1177.0	758.7	686.6	637.6	626.0	654.9	657.7
65°	8345.9	6802.5	4520.6	2195.4	934.7	657.7	626.0	582.7	588.5	617.4	614.5
67.5°	8614.2	7053.5	4419.6	1826.1	741.4	582.7	562.5	525.0	539.5	562.5	565.4
70°	8449.8	6912.1	3920.5	1379.0	579.9	507.7	493.3	470.2	481.8	510.6	522.2
72.5°	7644.9	6190.9	3049.3	931.8	467.3	427.0	432.7	421.2	435.6	461.6	487.5
75°	6205.3	4679.2	2045.4	597.2	369.3	363.5	372.1	363.5	369.3	395.2	409.7
77.5°	3239.7	2281.9	1018.4	372.1	274.1	282.7	297.1	300.0	317.3	323.1	328.9
80°	1511.7	1027.0	424.1	207.7	181.7	199.1	227.9	230.8	236.6	245.2	248.1
82.5°	493.3	308.7	196.2	112.5	103.9	112.5	147.1	176.0	178.9	196.2	196.2
85°	51.9	31.7	43.3	46.2	40.4	49.0	66.4	63.5	28.8	17.3	17.3
87.5°	14.4	11.5	14.4	14.4	11.5	11.5	8.7	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)