

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: P841447

Luminaire Tested: **ARCH4-180-727-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841447
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-180-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1455mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27596 lumens
Efficiency: N/A
Efficacy: 153.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

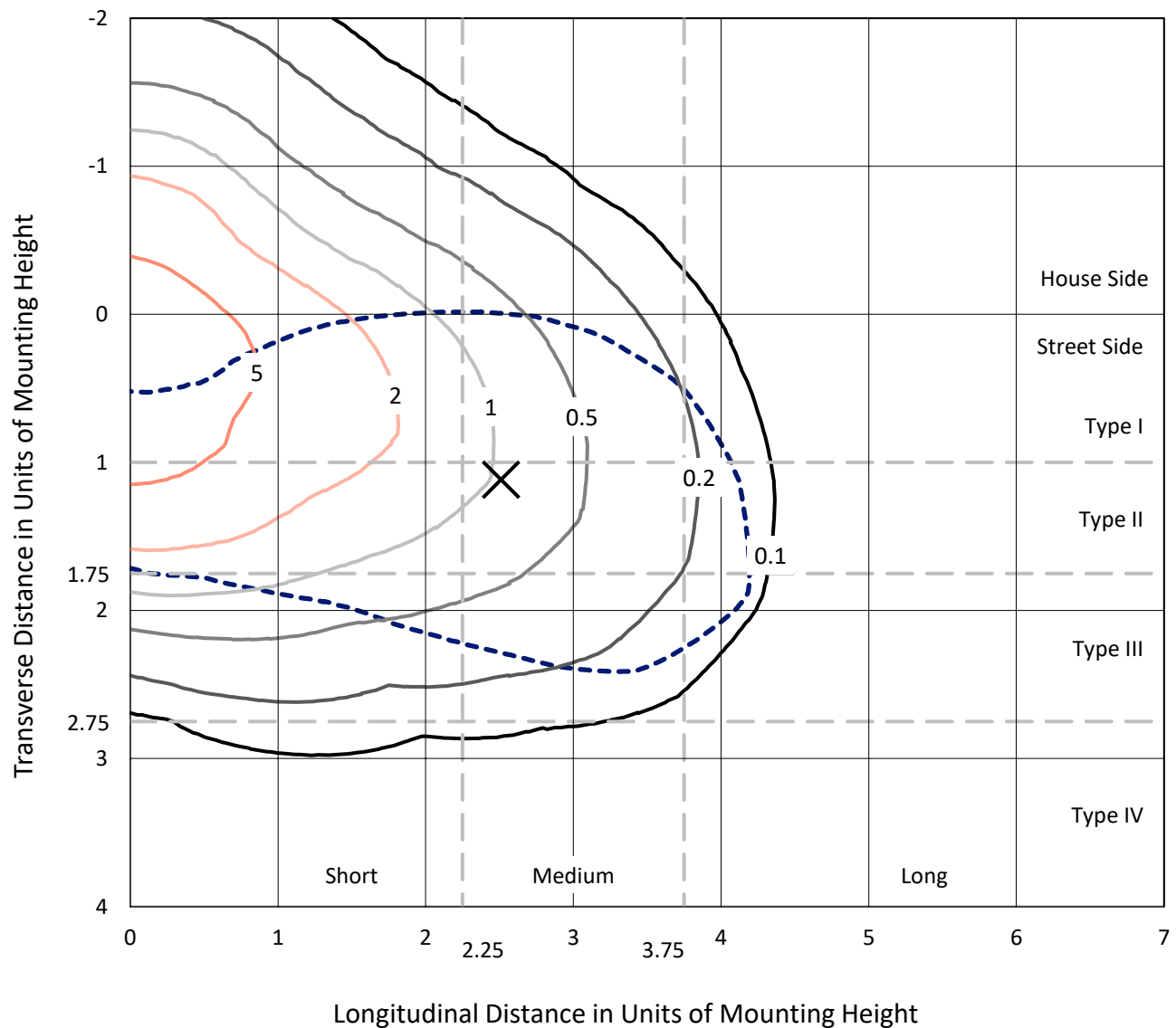
Input Watts (W): 180
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

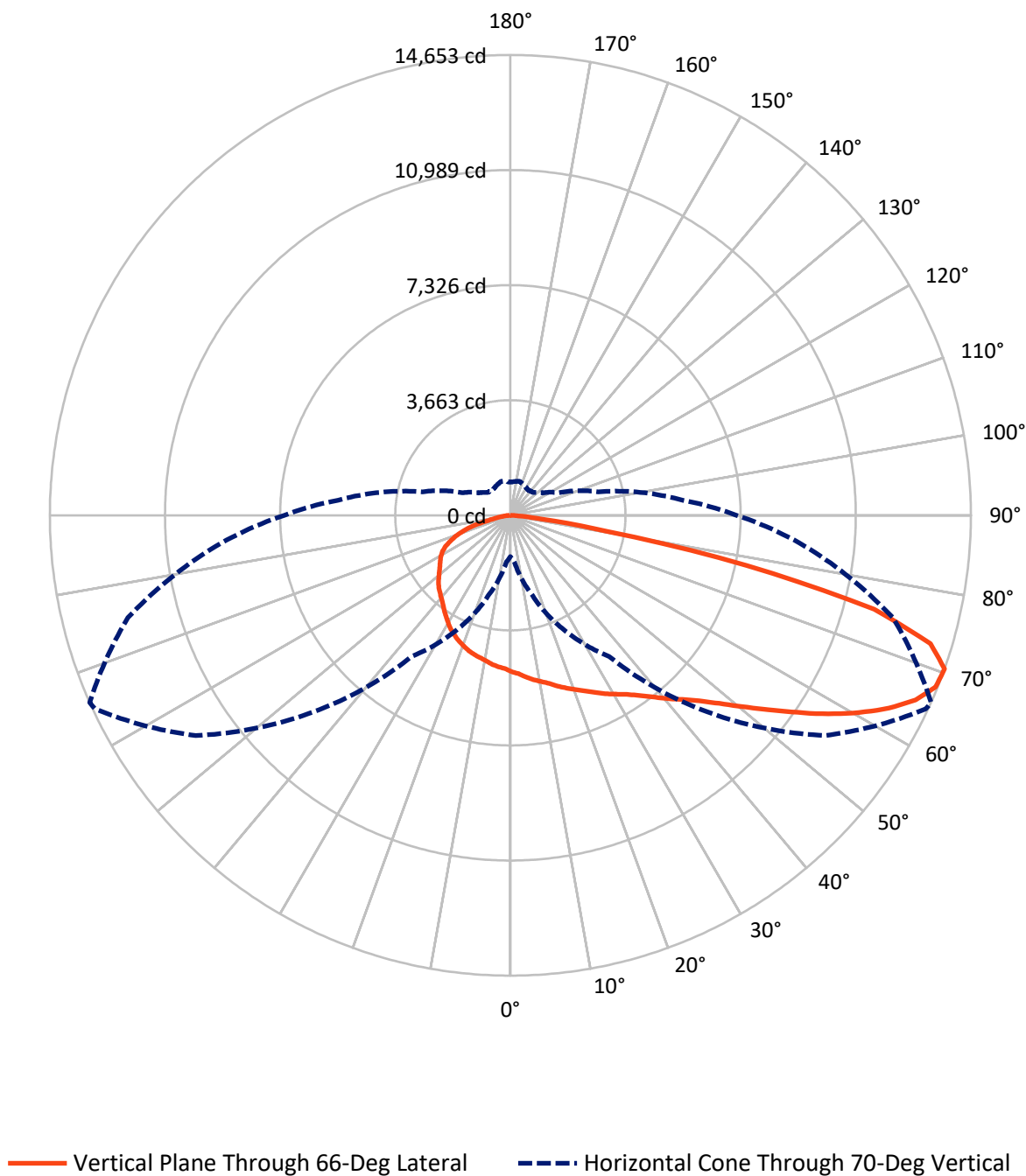
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7312.3	0.0	7312.3
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	20283.7	0.0	20283.7
	% Fixture	73.5	0.0	73.5
Total	Lumens	27596.0	0.0	27596.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	478.6	1.7
10°-20°	1435.5	5.2
20°-30°	2406.4	8.7
30°-40°	3603.2	13.1
40°-50°	4817.5	17.5
50°-60°	5624.6	20.4
60°-70°	5592.8	20.3
70°-80°	3311.0	12.0
80°-90°	326.3	1.2
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°	27596.0	100.0
0°-180°	27596.0	100.0

Coefficient of Utilization



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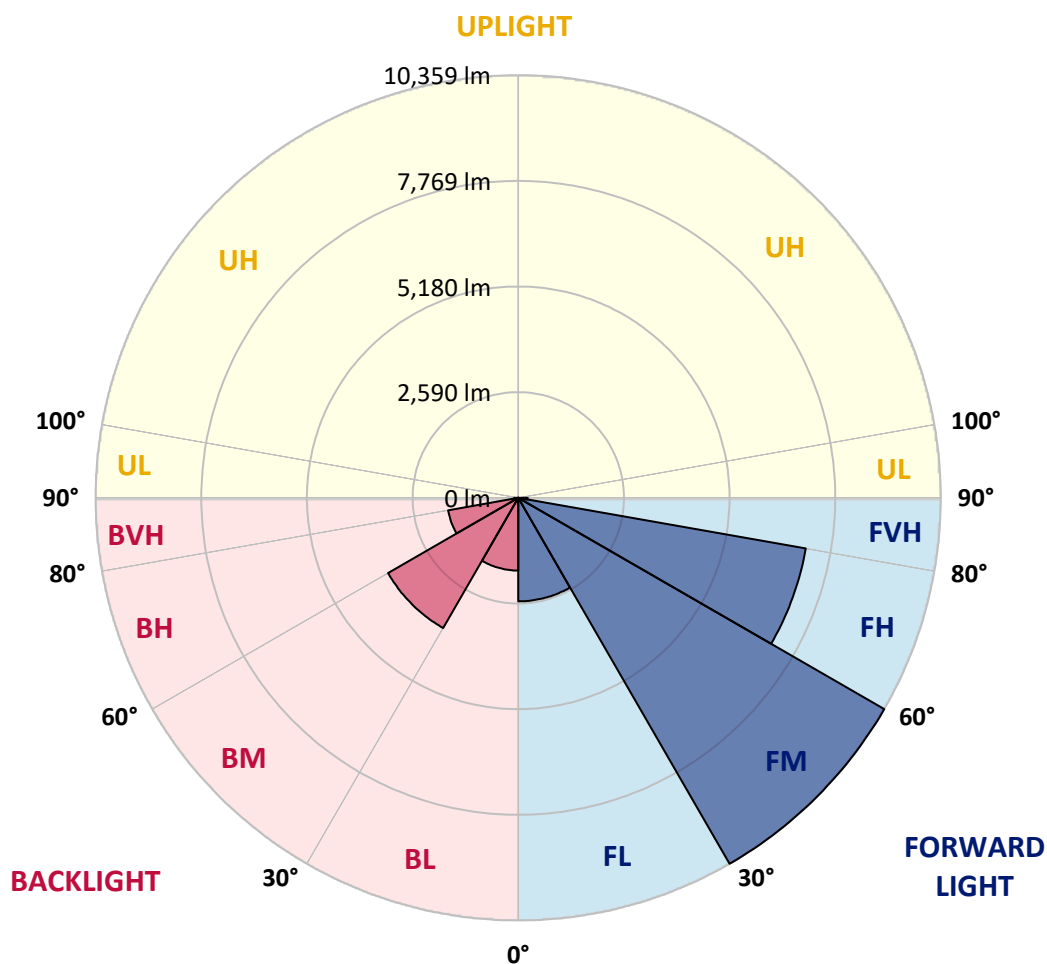
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2538.1	9.2			
FM	(30°-60°)	10359.2	37.5			
FH	(60°-80°)	7157.1	25.9			G3/7500
FVH	(80°-90°)	229.4	0.8			G3/500
BL	(0°-30°)	1782.4	6.5	B3/2500		
BM	(30°-60°)	3686.2	13.4	B3/5000		
BH	(60°-80°)	1746.7	6.3	B3/2500		G3/2500
BVH	(80°-90°)	97.0	0.4			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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4980.4	4980.4	4980.4	4980.4	4980.4	4980.4	4980.4	4980.4	4980.4	4980.4	4980.4
2.5°	5163.6	5155.4	5151.3	5135.1	5098.5	5114.7	5078.1	5053.7	5049.6	4992.7	4960.1
5°	5375.1	5371.1	5362.9	5338.5	5281.6	5289.7	5228.7	5183.9	5171.7	5082.2	5013.0
7.5°	5554.2	5546.0	5542.0	5509.4	5448.4	5444.3	5371.1	5306.0	5285.6	5163.6	5057.8
10°	5692.5	5680.3	5688.5	5655.9	5590.8	5578.6	5485.0	5399.6	5379.2	5224.6	5078.1
12.5°	5810.5	5802.4	5814.6	5786.1	5733.2	5721.0	5627.4	5517.6	5493.1	5314.1	5122.9
15°	5940.7	5912.2	5936.7	5924.5	5887.8	5883.8	5798.3	5676.2	5643.7	5428.0	5192.0
17.5°	6009.9	5993.6	6022.1	6026.2	6009.9	6038.4	5957.0	5810.5	5782.0	5533.8	5253.1
20°	6058.7	6034.3	6066.9	6091.3	6103.5	6160.5	6095.4	5952.9	5920.4	5635.6	5310.0
22.5°	6225.6	6172.7	6176.7	6193.0	6201.1	6282.5	6241.8	6103.5	6070.9	5761.7	5379.2
25°	6644.7	6538.9	6469.7	6420.9	6363.9	6433.1	6408.7	6274.4	6245.9	5912.2	5464.7
27.5°	7295.7	7161.4	7023.1	6880.7	6656.9	6628.4	6587.7	6465.6	6433.1	6062.8	5550.1
30°	8036.3	7902.0	7739.2	7511.4	7092.3	6872.5	6778.9	6644.7	6608.0	6197.1	5631.5
32.5°	8772.8	8654.8	8492.0	8215.3	7617.2	7169.6	6970.2	6831.8	6795.2	6343.6	5729.1
35°	9346.5	9273.2	9167.4	8821.6	8138.0	7519.5	7246.9	7080.1	7039.4	6575.5	5908.2
37.5°	9810.3	9757.4	9667.9	9305.8	8516.4	7869.4	7564.3	7373.0	7328.3	6827.8	6099.4
40°	10493.9	10355.6	10282.3	9757.4	8846.0	8186.8	7922.3	7723.0	7674.1	7096.3	6254.0
42.5°	11075.8	10974.1	10884.6	10160.3	9159.3	8459.4	8260.1	8077.0	8011.9	7360.8	6420.9
45°	11173.5	11214.1	11169.4	10359.7	9655.7	8728.0	8601.9	8483.9	8422.8	7718.9	6673.2
47.5°	11177.5	11177.5	10913.0	10473.6	10270.1	9029.1	8968.1	9008.8	8943.7	8174.6	6974.3
50°	10884.6	10937.5	10799.1	10502.1	10432.9	9330.2	9415.7	9635.4	9570.3	8658.8	7299.8
52.5°	10278.3	10453.2	10449.2	10457.3	10196.9	9586.6	9887.7	10388.1	10278.3	9204.1	7645.6
55°	9208.1	9558.1	9871.4	10139.9	9993.5	9741.2	10465.5	11189.7	11075.8	9814.4	7995.6
57.5°	8292.6	8516.4	8907.0	9667.9	9753.4	9875.5	11006.6	12027.9	11926.2	10489.9	8361.8
60°	7246.9	7556.1	7946.7	9029.1	9460.4	10050.4	11600.7	12845.8	12748.2	11173.5	8715.8
62.5°	5639.6	6038.4	6819.6	8048.5	9033.2	10160.3	12068.6	13566.0	13521.3	11820.4	9033.2
65°	3930.6	4284.7	5379.2	6844.0	8353.6	10111.5	12443.0	14208.9	14168.2	12349.4	9257.0
67.5°	2294.9	2705.9	3942.9	5509.4	7153.3	9773.7	12565.1	14587.3	14587.3	12670.8	9318.0
70°	1310.2	1501.5	2600.1	4016.1	5485.0	8841.9	12223.3	14583.3	14652.5	12597.6	9065.7
72.5°	915.5	1001.0	1749.7	2701.8	3719.1	7153.3	11328.1	13879.3	13972.9	11905.9	8203.1
75°	712.1	773.1	1232.9	1843.3	2343.7	4858.4	9370.9	11702.4	11950.6	10148.1	6632.5
77.5°	541.2	585.9	720.2	1151.5	1501.5	2791.3	6184.9	7674.1	7690.4	6213.4	3556.3
80°	394.7	439.5	480.1	703.9	797.5	1306.1	2335.6	3206.4	3116.8	3007.0	1924.6
82.5°	236.0	280.8	293.0	382.5	390.6	557.5	817.9	1033.5	992.8	1322.4	903.3
85°	101.7	142.4	150.6	175.0	166.8	227.9	325.5	272.6	244.1	280.8	195.3
87.5°	24.4	40.7	40.7	44.8	36.6	57.0	61.0	44.8	40.7	48.8	48.8
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°	4980.4	4980.4	4980.4	4980.4	4980.4	4980.4	4980.4	4980.4	4980.4	4980.4	4980.4
2.5°	4952.0	4939.8	4943.8	4874.7	4854.3	4834.0	4821.8	4813.6	4805.5	4817.7	4829.9
5°	4988.6	4960.1	4927.6	4825.8	4785.1	4740.4	4707.8	4679.3	4667.1	4667.1	4679.3
7.5°	5017.1	4968.2	4899.1	4764.8	4691.6	4630.5	4577.6	4541.0	4520.7	4520.7	4532.9
10°	5021.1	4952.0	4842.1	4679.3	4581.7	4492.2	4431.1	4390.4	4362.0	4362.0	4370.1
12.5°	5045.6	4952.0	4809.6	4614.2	4492.2	4382.3	4309.1	4248.0	4235.8	4235.8	4244.0
15°	5086.2	4972.3	4789.2	4557.3	4410.8	4284.7	4203.3	4138.2	4113.8	4130.0	4134.1
17.5°	5122.9	4984.5	4752.6	4484.0	4309.1	4170.7	4081.2	4024.2	3991.7	4028.3	4028.3
20°	5147.3	4984.5	4699.7	4390.4	4199.2	4044.6	3959.1	3890.0	3865.5	3910.3	3914.4
22.5°	5183.9	4980.4	4642.7	4296.9	4081.2	3918.4	3833.0	3780.1	3767.9	3816.7	3833.0
25°	5224.6	4988.6	4581.7	4191.1	3951.0	3792.3	3727.2	3702.8	3710.9	3772.0	3792.3
27.5°	5269.3	5004.9	4520.7	4073.1	3808.6	3666.2	3629.5	3641.8	3674.3	3751.6	3776.0
30°	5310.0	5008.9	4435.2	3934.7	3645.8	3511.5	3527.8	3580.7	3629.5	3706.9	3735.3
32.5°	5362.9	5013.0	4345.7	3784.2	3470.9	3373.2	3446.4	3531.9	3580.7	3654.0	3686.5
35°	5493.1	5082.2	4276.5	3637.7	3308.1	3255.2	3377.3	3487.1	3515.6	3580.7	3609.2
37.5°	5643.7	5196.1	4239.9	3487.1	3149.4	3137.2	3291.8	3401.7	3409.8	3450.5	3479.0
40°	5737.3	5244.9	4199.2	3361.0	3007.0	3015.1	3173.8	3259.3	3243.0	3271.5	3291.8
42.5°	5830.9	5261.2	4113.8	3255.2	2872.7	2880.8	3002.9	3064.0	3072.1	3133.1	3161.6
45°	5989.6	5306.0	4020.2	3157.5	2750.6	2722.2	2795.4	2876.8	2982.6	3100.6	3133.1
47.5°	6201.1	5399.6	3922.5	3039.5	2632.6	2539.1	2567.5	2710.0	2819.8	2929.7	2950.0
50°	6416.8	5493.1	3833.0	2897.1	2514.6	2343.7	2355.9	2486.2	2575.7	2661.1	2673.3
52.5°	6628.4	5574.5	3755.7	2762.8	2380.4	2111.8	2160.6	2294.9	2355.9	2396.6	2408.8
55°	6840.0	5643.7	3686.5	2648.9	2225.7	1928.7	1973.5	2099.6	2160.6	2181.0	2189.1
57.5°	7059.7	5725.1	3633.6	2551.3	2050.8	1765.9	1794.4	1883.9	1940.9	1965.3	1957.2
60°	7242.8	5794.2	3605.1	2449.5	1875.8	1615.4	1607.3	1688.6	1770.0	1794.4	1786.3
62.5°	7385.2	5839.0	3560.4	2319.3	1721.2	1464.8	1424.1	1529.9	1615.4	1631.7	1643.9
65°	7462.5	5843.1	3450.5	2152.5	1562.5	1302.1	1273.6	1379.4	1432.3	1448.6	1448.6
67.5°	7450.3	5778.0	3234.9	1928.7	1416.0	1155.6	1131.2	1196.3	1273.6	1285.8	1273.6
70°	7198.1	5509.4	2889.0	1692.7	1241.0	1025.4	980.6	1045.7	1119.0	1074.2	1053.9
72.5°	6481.9	4813.6	2380.4	1432.3	1045.7	862.6	842.3	907.4	911.5	919.6	899.2
75°	5114.7	3584.8	1782.2	1114.9	846.4	724.3	720.2	708.0	724.3	756.8	732.4
77.5°	2685.5	1790.4	964.4	683.6	614.4	581.9	553.4	549.3	598.1	618.5	594.1
80°	1456.7	1005.0	553.4	411.0	374.3	378.4	415.0	406.9	459.8	472.0	451.7
82.5°	634.8	476.1	272.6	248.2	248.2	244.1	256.3	284.8	341.8	341.8	272.6
85°	138.3	118.0	105.8	122.1	138.3	138.3	138.3	138.3	97.7	52.9	36.6
87.5°	44.8	44.8	44.8	48.8	52.9	52.9	44.8	32.6	20.3	4.1	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)