

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: P841159

Luminaire Tested: **ARCH4-140-727-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841159
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: ARCH4-140-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22580 lumens
Efficiency: N/A
Efficacy: 159.8 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): 141.3
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

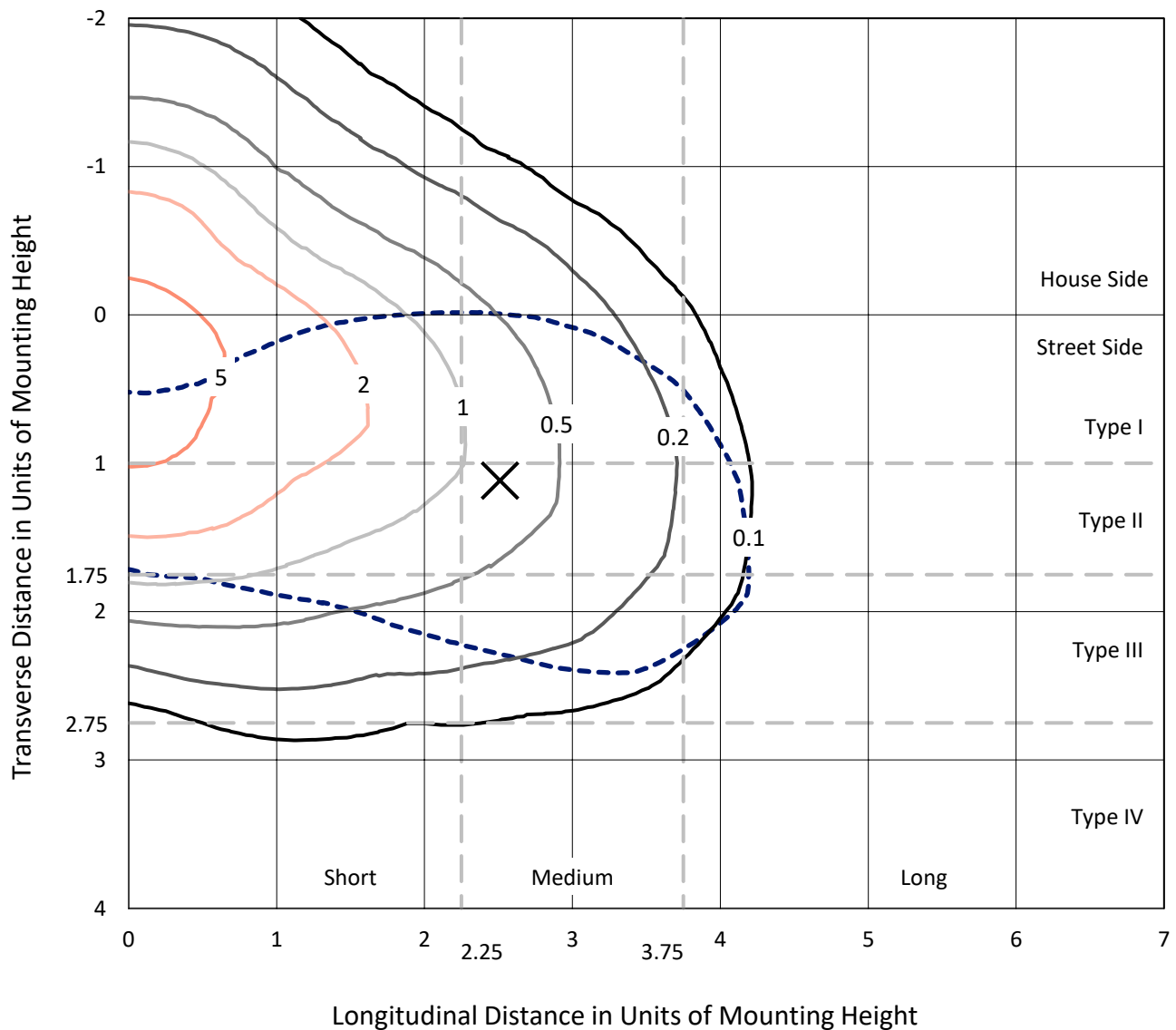


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Iso-Footcandle Lines of Horizontal Illumination

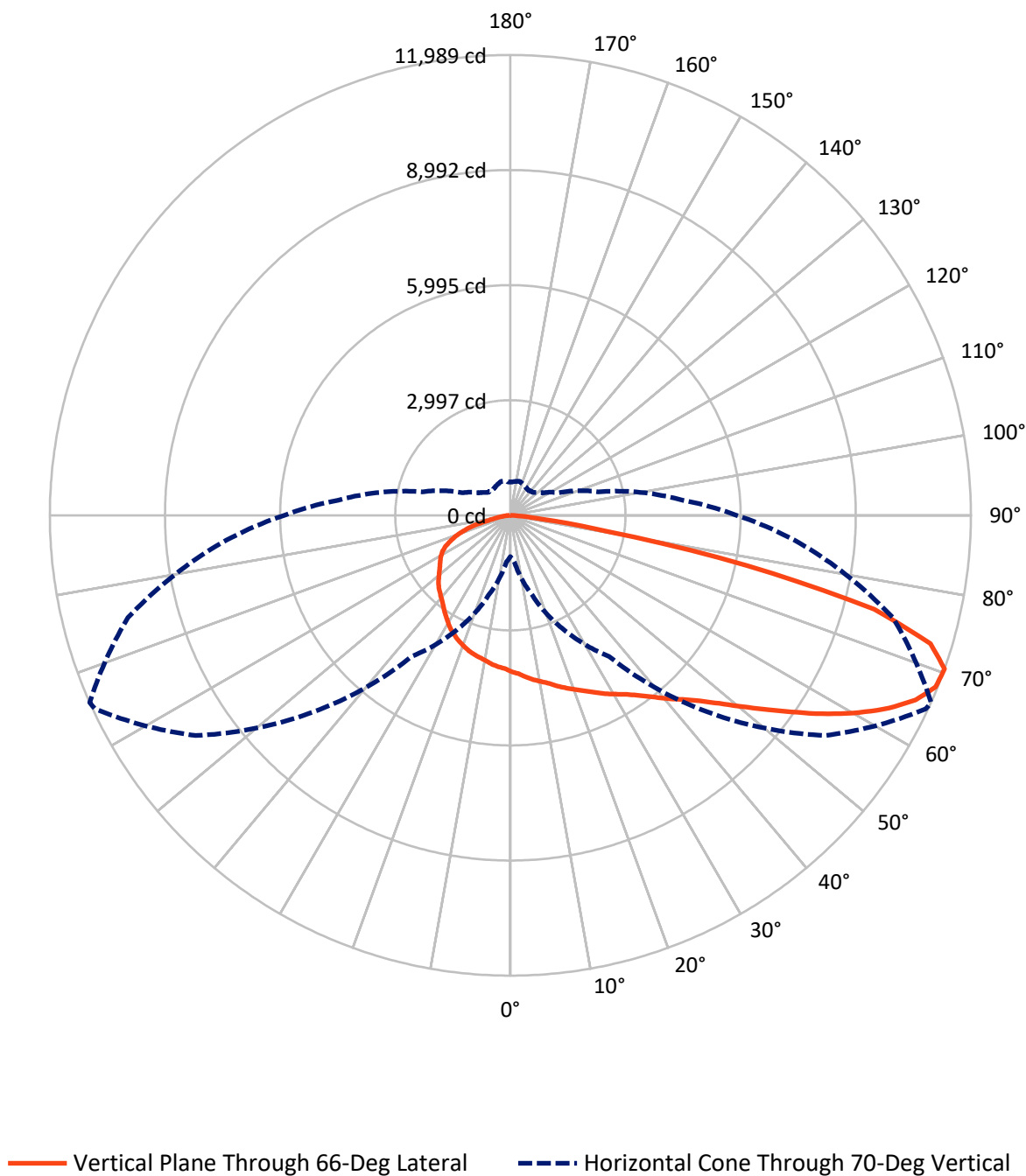
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 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	5983.2	0.0	5983.2
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	16596.8	0.0	16596.8
	% Fixture	73.5	0.0	73.5
Total	Lumens	22580.0	0.0	22580.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	391.6	1.7
10°-20°	1174.6	5.2
20°-30°	1969.0	8.7
30°-40°	2948.3	13.1
40°-50°	3941.8	17.5
50°-60°	4602.2	20.4
60°-70°	4576.2	20.3
70°-80°	2709.2	12.0
80°-90°	267.0	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°	22580.0	100.0
0°-180°	22580.0	100.0

Coefficient of Utilization



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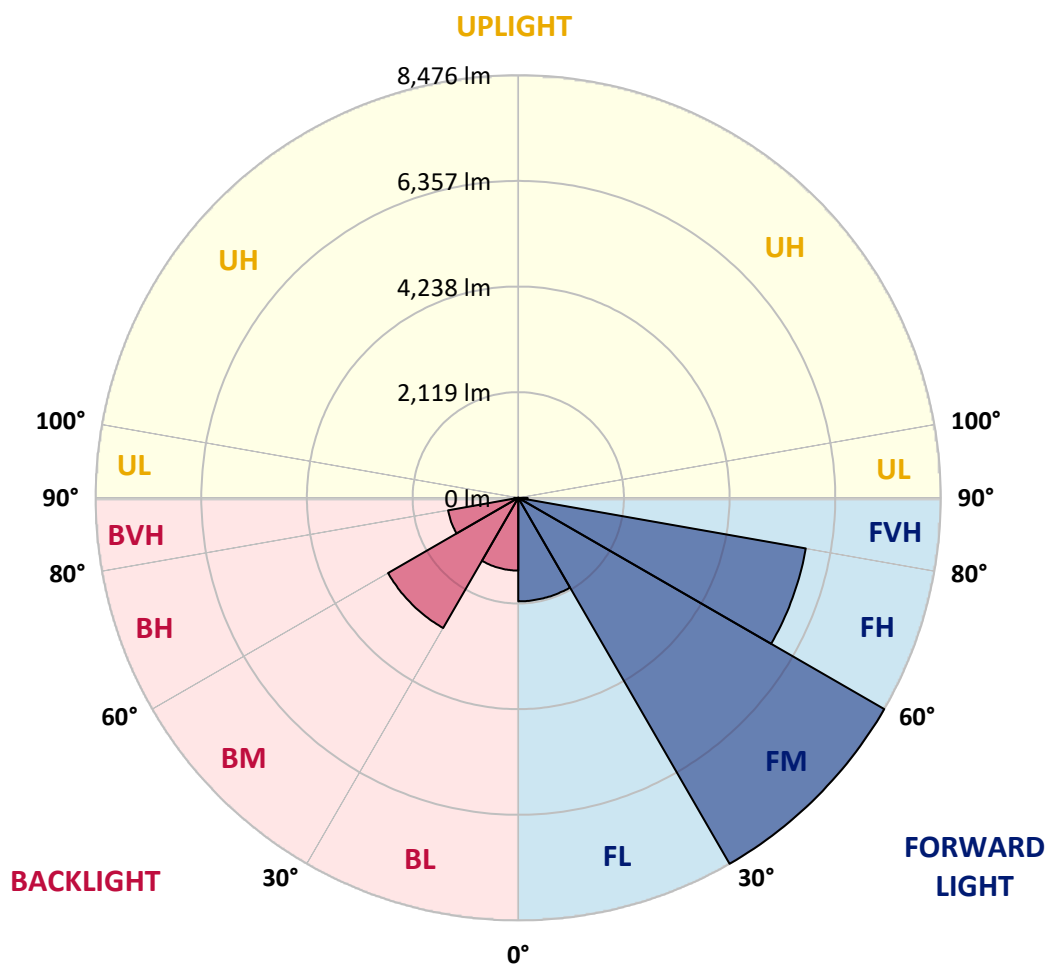
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2076.8	9.2			
FM	(30°-60°)	8476.2	37.5			
FH	(60°-80°)	5856.2	25.9			G3/7500
FVH	(80°-90°)	187.7	0.8			G2/225
BL	(0°-30°)	1458.4	6.5	B3/2500		
BM	(30°-60°)	3016.1	13.4	B3/5000		
BH	(60°-80°)	1429.2	6.3	B3/2500		G3/2500
BVH	(80°-90°)	79.4	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°	4075.2	4075.2	4075.2	4075.2	4075.2	4075.2	4075.2	4075.2	4075.2	4075.2	4075.2
2.5°	4225.0	4218.3	4215.0	4201.7	4171.7	4185.0	4155.1	4135.1	4131.8	4085.2	4058.5
5°	4398.1	4394.8	4388.1	4368.2	4321.6	4328.2	4278.3	4241.6	4231.7	4158.4	4101.8
7.5°	4544.6	4538.0	4534.6	4508.0	4458.1	4454.7	4394.8	4341.5	4324.9	4225.0	4138.4
10°	4657.8	4647.8	4654.5	4627.9	4574.6	4564.6	4488.0	4418.1	4401.5	4274.9	4155.1
12.5°	4754.4	4747.7	4757.7	4734.4	4691.1	4681.1	4604.5	4514.7	4494.7	4348.2	4191.7
15°	4860.9	4837.6	4857.6	4847.6	4817.6	4814.3	4744.4	4644.5	4617.9	4441.4	4248.3
17.5°	4917.5	4904.2	4927.5	4930.8	4917.5	4940.8	4874.2	4754.4	4731.1	4528.0	4298.2
20°	4957.5	4937.5	4964.1	4984.1	4994.1	5040.7	4987.4	4870.9	4844.3	4611.2	4344.9
22.5°	5094.0	5050.7	5054.0	5067.3	5074.0	5140.6	5107.3	4994.1	4967.5	4714.4	4401.5
25°	5436.9	5350.3	5293.7	5253.8	5207.2	5263.8	5243.8	5133.9	5110.6	4837.6	4471.4
27.5°	5969.6	5859.7	5746.5	5630.0	5446.9	5423.6	5390.3	5290.4	5263.8	4960.8	4541.3
30°	6575.5	6465.7	6332.5	6146.1	5803.1	5623.3	5546.8	5436.9	5406.9	5070.7	4607.9
32.5°	7178.2	7081.6	6948.4	6722.0	6232.6	5866.4	5703.2	5590.0	5560.1	5190.5	4687.8
35°	7647.6	7587.7	7501.1	7218.1	6658.8	6152.7	5929.6	5793.1	5759.8	5380.3	4834.3
37.5°	8027.2	7983.9	7910.6	7614.3	6968.4	6439.0	6189.3	6032.9	5996.2	5586.7	4990.8
40°	8586.5	8473.3	8413.4	7983.9	7238.1	6698.7	6482.3	6319.2	6279.2	5806.5	5117.3
42.5°	9062.6	8979.4	8906.1	8313.5	7494.5	6921.8	6758.7	6608.8	6555.6	6022.9	5253.8
45°	9142.5	9175.8	9139.2	8476.6	7900.6	7141.5	7038.3	6941.8	6891.8	6315.9	5460.2
47.5°	9145.8	9145.8	8929.4	8569.9	8403.4	7387.9	7338.0	7371.3	7318.0	6688.7	5706.6
50°	8906.1	8949.4	8836.2	8593.2	8536.6	7634.3	7704.2	7884.0	7830.7	7084.9	5972.9
52.5°	8410.0	8553.2	8549.9	8556.5	8343.5	7844.0	8090.4	8499.9	8410.0	7531.1	6255.9
55°	7534.4	7820.7	8077.1	8296.8	8177.0	7970.6	8563.2	9155.8	9062.6	8030.5	6542.3
57.5°	6785.3	6968.4	7288.0	7910.6	7980.6	8080.4	9006.0	9841.7	9758.4	8583.2	6841.9
60°	5929.6	6182.7	6502.3	7387.9	7740.8	8223.6	9492.1	10510.9	10431.0	9142.5	7131.6
62.5°	4614.5	4940.8	5580.1	6585.5	7391.3	8313.5	9875.0	11100.2	11063.6	9671.9	7391.3
65°	3216.2	3505.8	4401.5	5600.0	6835.2	8273.5	10181.3	11626.2	11592.9	10104.7	7574.4
67.5°	1877.8	2214.0	3226.2	4508.0	5853.1	7997.2	10281.2	11935.9	11935.9	10367.7	7624.3
70°	1072.1	1228.5	2127.5	3286.1	4488.0	7234.8	10001.5	11932.5	11989.1	10307.8	7417.9
72.5°	749.1	819.0	1431.6	2210.7	3043.1	5853.1	9269.0	11356.6	11433.1	9741.8	6712.1
75°	582.6	632.6	1008.8	1508.2	1917.7	3975.3	7667.6	9575.3	9778.4	8303.5	5426.9
77.5°	442.8	479.4	589.3	942.2	1228.5	2284.0	5060.7	6279.2	6292.6	5084.0	2909.9
80°	323.0	359.6	392.9	576.0	652.6	1068.7	1911.1	2623.6	2550.3	2460.4	1574.8
82.5°	193.1	229.7	239.7	313.0	319.6	456.1	669.2	845.7	812.4	1082.1	739.1
85°	83.2	116.5	123.2	143.2	136.5	186.4	266.4	223.1	199.8	229.7	159.8
87.5°	20.0	33.3	33.3	36.6	30.0	46.6	49.9	36.6	33.3	40.0	40.0
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°	4075.2	4075.2	4075.2	4075.2	4075.2	4075.2	4075.2	4075.2	4075.2	4075.2	4075.2
2.5°	4051.9	4041.9	4045.2	3988.6	3972.0	3955.3	3945.3	3938.7	3932.0	3942.0	3952.0
5°	4081.8	4058.5	4031.9	3948.7	3915.4	3878.7	3852.1	3828.8	3818.8	3818.8	3828.8
7.5°	4105.1	4065.2	4008.6	3898.7	3838.8	3788.8	3745.6	3715.6	3699.0	3699.0	3708.9
10°	4108.5	4051.9	3962.0	3828.8	3748.9	3675.6	3625.7	3592.4	3569.1	3569.1	3575.8
12.5°	4128.4	4051.9	3935.3	3775.5	3675.6	3585.8	3525.8	3475.9	3465.9	3465.9	3472.6
15°	4161.7	4068.5	3918.7	3728.9	3609.1	3505.8	3439.3	3386.0	3366.0	3379.3	3382.7
17.5°	4191.7	4078.5	3888.7	3669.0	3525.8	3412.6	3339.4	3292.8	3266.1	3296.1	3296.1
20°	4211.7	4078.5	3845.4	3592.4	3435.9	3309.4	3239.5	3182.9	3162.9	3199.5	3202.9
22.5°	4241.6	4075.2	3798.8	3515.8	3339.4	3206.2	3136.3	3093.0	3083.0	3123.0	3136.3
25°	4274.9	4081.8	3748.9	3429.3	3232.8	3103.0	3049.7	3029.7	3036.4	3086.3	3103.0
27.5°	4311.6	4095.2	3699.0	3332.7	3116.3	2999.8	2969.8	2979.8	3006.4	3069.7	3089.7
30°	4344.9	4098.5	3629.0	3219.5	2983.1	2873.3	2886.6	2929.9	2969.8	3033.1	3056.4
32.5°	4388.1	4101.8	3555.8	3096.3	2840.0	2760.1	2820.0	2889.9	2929.9	2989.8	3016.4
35°	4494.7	4158.4	3499.2	2976.5	2706.8	2663.5	2763.4	2853.3	2876.6	2929.9	2953.2
37.5°	4617.9	4251.6	3469.2	2853.3	2576.9	2567.0	2693.5	2783.4	2790.0	2823.3	2846.6
40°	4694.4	4291.6	3435.9	2750.1	2460.4	2467.1	2596.9	2666.8	2653.5	2676.8	2693.5
42.5°	4771.0	4304.9	3366.0	2663.5	2350.6	2357.2	2457.1	2507.0	2513.7	2563.6	2586.9
45°	4900.9	4341.5	3289.4	2583.6	2250.7	2227.4	2287.3	2353.9	2440.4	2537.0	2563.6
47.5°	5074.0	4418.1	3209.5	2487.1	2154.1	2077.5	2100.8	2217.4	2307.3	2397.2	2413.8
50°	5250.5	4494.7	3136.3	2370.5	2057.6	1917.7	1927.7	2034.3	2107.5	2177.4	2187.4
52.5°	5423.6	4561.3	3073.0	2260.7	1947.7	1728.0	1767.9	1877.8	1927.7	1961.0	1971.0
55°	5596.7	4617.9	3016.4	2167.4	1821.2	1578.1	1614.8	1718.0	1767.9	1784.6	1791.2
57.5°	5776.5	4684.5	2973.1	2087.5	1678.0	1445.0	1468.3	1541.5	1588.1	1608.1	1601.4
60°	5926.3	4741.1	2949.8	2004.3	1534.8	1321.8	1315.1	1381.7	1448.3	1468.3	1461.6
62.5°	6042.8	4777.7	2913.2	1897.8	1408.3	1198.6	1165.3	1251.9	1321.8	1335.1	1345.1
65°	6106.1	4781.0	2823.3	1761.2	1278.5	1065.4	1042.1	1128.7	1171.9	1185.3	1185.3
67.5°	6096.1	4727.7	2646.9	1578.1	1158.6	945.5	925.6	978.8	1042.1	1052.1	1042.1
70°	5889.7	4508.0	2363.9	1385.0	1015.5	839.0	802.4	855.7	915.6	879.0	862.3
72.5°	5303.7	3938.7	1947.7	1171.9	855.7	705.8	689.2	742.5	745.8	752.4	735.8
75°	4185.0	2933.2	1458.3	912.3	692.5	592.6	589.3	579.3	592.6	619.3	599.3
77.5°	2197.4	1464.9	789.1	559.3	502.7	476.1	452.8	449.5	489.4	506.1	486.1
80°	1191.9	822.4	452.8	336.3	306.3	309.6	339.6	332.9	376.2	386.2	369.6
82.5°	519.4	389.5	223.1	203.1	203.1	199.8	209.8	233.1	279.7	279.7	223.1
85°	113.2	96.6	86.6	99.9	113.2	113.2	113.2	113.2	79.9	43.3	30.0
87.5°	36.6	36.6	36.6	40.0	43.3	43.3	36.6	26.6	16.6	3.3	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)