

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: P841727

Luminaire Tested: **ARCH4-220-722-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841727
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-220-722-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2200K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20290 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 221.8
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



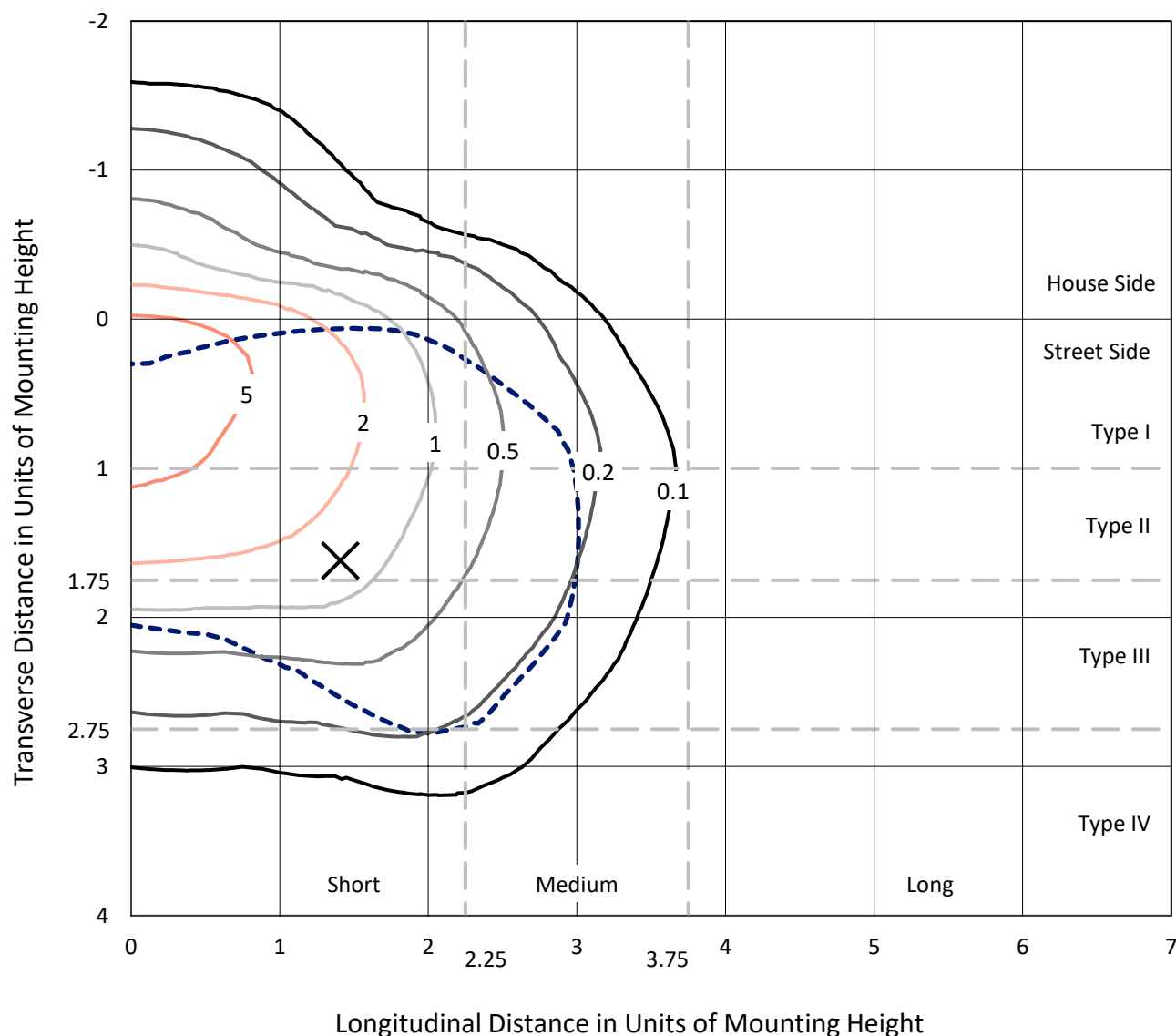
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



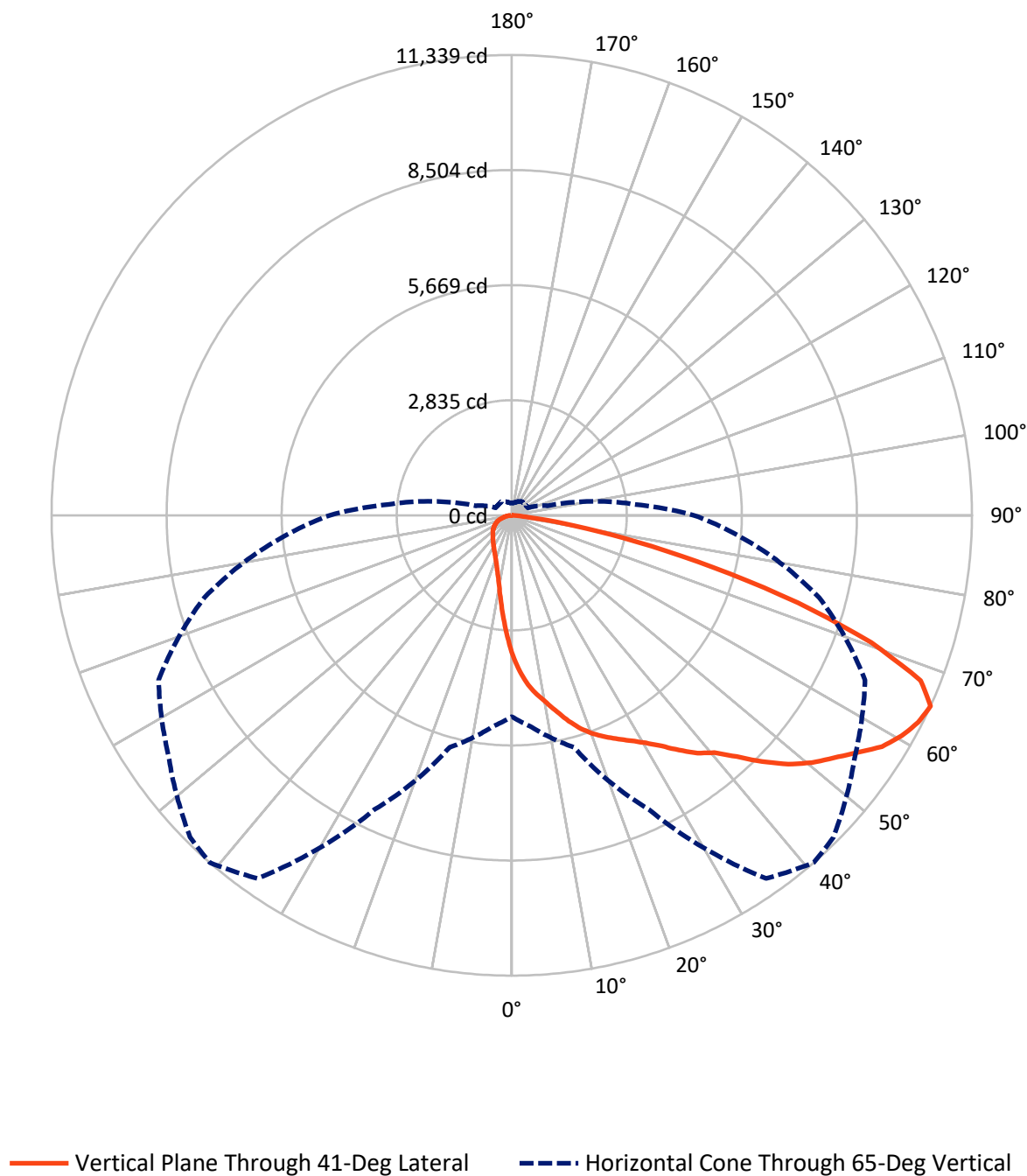
Based on 25 foot mounting height. Maximum calculated value = 8 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2604.9	0.0	2604.9
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	17685.1	0.0	17685.1
	% Fixture	87.2	0.0	87.2
Total	Lumens	20290.0	0.0	20290.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	322.1	1.6
10°-20°	965.9	4.8
20°-30°	1661.7	8.2
30°-40°	2520.3	12.4
40°-50°	3692.3	18.2
50°-60°	4662.6	23.0
60°-70°	4372.0	21.5
70°-80°	1948.6	9.6
80°-90°	144.4	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°	20290.0	100.0
0°-180°	20290.0	100.0

Coefficient of Utilization



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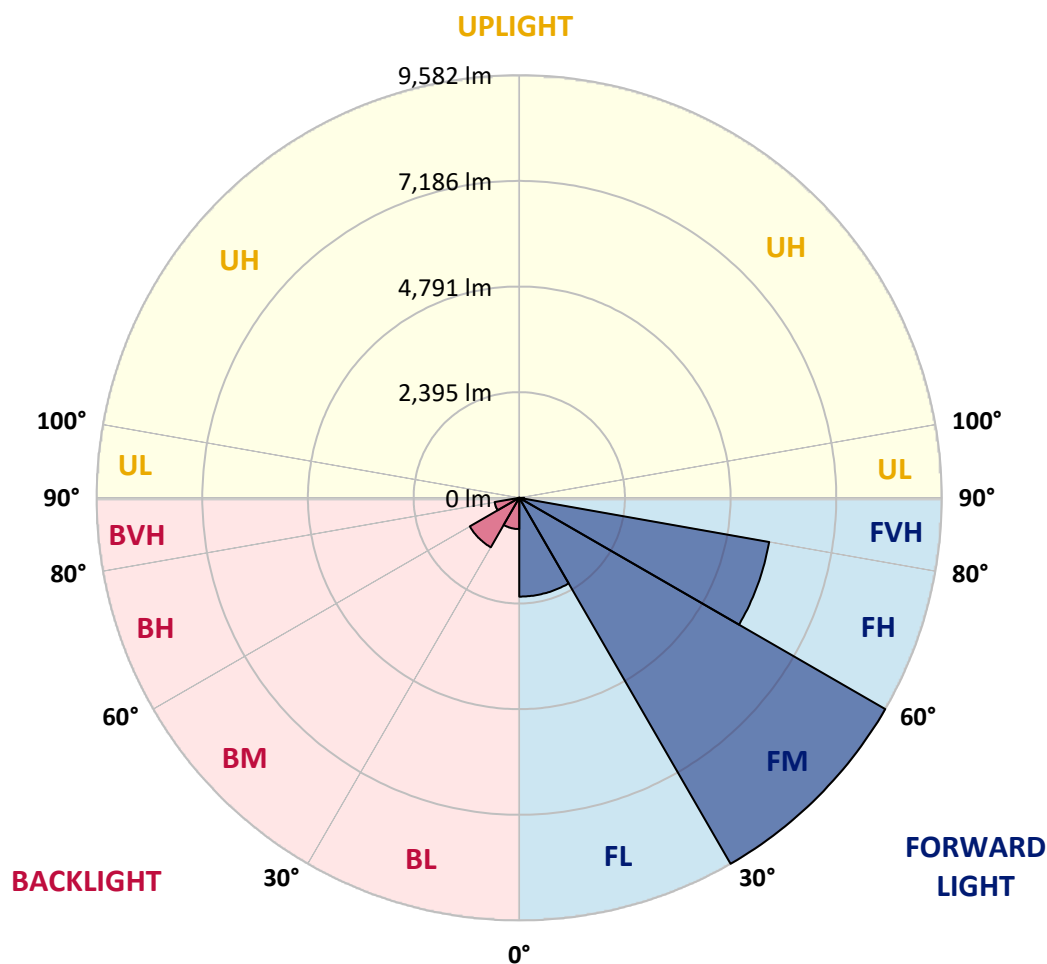
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2240.8	11.0			
FM	(30°-60°)	9581.7	47.2			
FH	(60°-80°)	5754.8	28.4			G3/7500
FVH	(80°-90°)	107.8	0.5			G2/225
BL	(0°-30°)	709.0	3.5	B2/1000		
BM	(30°-60°)	1293.5	6.4	B2/2500		
BH	(60°-80°)	565.9	2.8	B2/1000		G2/1000
BVH	(80°-90°)	36.5	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	3457.3	3457.3	3457.3	3457.3	3457.3	3457.3	3457.3	3457.3	3457.3	3457.3	3457.3
2.5°	3987.9	3975.1	3966.5	3919.4	3919.4	3855.2	3859.5	3799.6	3726.9	3611.3	3487.3
5°	4364.4	4347.3	4325.9	4278.8	4261.7	4197.6	4189.0	4103.4	3979.3	3778.2	3555.7
7.5°	4693.9	4676.8	4646.8	4578.4	4531.3	4454.3	4432.9	4321.6	4184.7	3936.5	3624.2
10°	4993.4	4980.6	4942.1	4856.5	4792.3	4698.2	4659.7	4509.9	4338.8	4064.9	3679.8
12.5°	5297.2	5280.1	5228.8	5156.0	5079.0	4967.7	4920.7	4728.1	4509.9	4206.1	3761.1
15°	5579.6	5553.9	5515.4	5438.4	5370.0	5263.0	5211.6	4984.9	4719.6	4364.4	3868.1
17.5°	5763.6	5742.2	5708.0	5665.2	5609.6	5528.3	5476.9	5254.4	4929.2	4518.5	3979.3
20°	5874.9	5866.3	5853.5	5827.8	5802.1	5746.5	5708.0	5498.3	5156.0	4668.2	4086.3
22.5°	5960.4	5951.9	5947.6	5947.6	5951.9	5930.5	5904.8	5725.1	5374.2	4826.5	4184.7
25°	6093.1	6088.8	6080.2	6071.7	6101.6	6105.9	6097.4	5973.3	5648.1	5036.2	4308.8
27.5°	6277.1	6264.2	6247.1	6238.6	6268.5	6289.9	6307.0	6221.4	5939.0	5250.1	4450.0
30°	6559.5	6521.0	6478.2	6448.2	6469.6	6503.9	6542.4	6491.0	6238.6	5515.4	4595.5
32.5°	6893.2	6846.2	6747.7	6692.1	6747.7	6773.4	6803.4	6777.7	6550.9	5802.1	4741.0
35°	7299.7	7244.1	7141.4	7060.1	7158.5	7102.9	7090.1	7064.4	6846.2	6084.5	4903.6
37.5°	7975.8	7894.5	7731.9	7552.2	7552.2	7432.4	7385.3	7308.3	7111.4	6337.0	5061.9
40°	8758.8	8651.8	8442.2	8176.9	7933.0	7684.8	7654.9	7599.2	7423.8	6627.9	5241.6
42.5°	9618.9	9413.5	9122.5	8801.6	8407.9	8125.5	8057.1	7898.8	7727.6	6923.2	5421.3
45°	10573.0	10145.2	9721.5	9558.9	8908.6	8651.8	8523.5	8236.8	8044.2	7231.3	5609.6
47.5°	10727.1	10393.3	10110.9	10085.2	9375.0	9161.0	9015.5	8604.8	8386.5	7560.7	5806.4
50°	10641.5	10440.4	10470.3	10367.7	9717.3	9576.1	9464.8	8998.4	8724.6	7877.4	5986.1
52.5°	10282.1	10393.3	10564.5	10376.2	10042.5	9926.9	9871.3	9422.0	9041.2	8168.3	6148.7
55°	9854.2	9931.2	10299.2	10530.2	10419.0	10316.3	10265.0	9914.1	9353.6	8412.2	6298.5
57.5°	9229.5	9195.2	9601.7	10504.6	10812.7	10752.7	10697.1	10397.6	9644.5	8587.6	6392.6
60°	8292.4	8219.7	8733.1	9991.1	10941.0	11035.2	11009.5	10718.5	9867.0	8583.4	6354.1
62.5°	6670.7	6850.4	7560.7	9152.5	10996.6	11236.3	11189.2	10744.2	9939.8	8335.2	6110.2
65°	4959.2	5215.9	5913.4	7997.2	10919.6	11338.9	11210.6	10324.9	9601.7	7843.1	5575.3
67.5°	3572.8	3799.6	4308.8	6580.9	10179.4	10868.3	10718.5	9640.2	8823.0	7145.7	4835.1
70°	2443.2	2605.8	2952.4	4792.3	8690.3	9396.4	9302.2	8617.6	7595.0	6315.6	3928.0
72.5°	1724.4	1792.8	2015.3	3162.1	6602.3	7372.5	7261.2	7090.1	6101.6	5250.1	3055.1
75°	1292.2	1335.0	1454.8	2045.3	4454.3	5108.9	5006.3	5104.7	4557.0	3975.1	2225.0
77.5°	487.8	530.6	825.8	1305.0	2635.8	3136.4	3033.7	3093.6	2533.1	2006.8	1108.2
80°	132.6	141.2	273.8	620.4	1198.1	1561.8	1420.6	1219.5	941.3	924.2	586.2
82.5°	55.6	64.2	124.1	333.8	427.9	427.9	359.4	445.0	359.4	432.2	282.4
85°	21.4	25.7	30.0	85.6	55.6	59.9	64.2	85.6	72.7	89.9	64.2
87.5°	0.0	0.0	0.0	4.3	4.3	8.6	4.3	8.6	12.8	12.8	12.8
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°	3457.3	3457.3	3457.3	3457.3	3457.3	3457.3	3457.3	3457.3	3457.3	3457.3	3457.3
2.5°	3435.9	3388.8	3320.4	3209.1	3093.6	3029.4	2948.1	2935.3	2849.7	2841.2	2806.9
5°	3457.3	3358.9	3183.5	2969.5	2759.9	2597.3	2477.5	2413.3	2289.2	2289.2	2255.0
7.5°	3474.4	3320.4	3038.0	2721.3	2434.7	2216.4	2053.8	1985.4	1874.1	1865.6	1839.9
10°	3478.7	3273.3	2879.7	2468.9	2118.0	1895.5	1737.2	1660.2	1561.8	1553.2	1536.1
12.5°	3512.9	3247.6	2738.5	2250.7	1891.3	1651.6	1497.6	1433.4	1356.4	1347.8	1330.7
15°	3568.6	3247.6	2618.7	2066.7	1690.1	1467.6	1335.0	1275.1	1219.5	1210.9	1202.4
17.5°	3624.2	3239.1	2498.8	1895.5	1523.3	1322.2	1206.6	1159.6	1116.8	1112.5	1103.9
20°	3675.5	3234.8	2379.0	1750.0	1394.9	1202.4	1112.5	1069.7	1035.5	1035.5	1031.2
22.5°	3726.9	3226.3	2263.5	1613.1	1283.7	1112.5	1035.5	988.4	962.7	962.7	958.5
25°	3803.9	3226.3	2156.5	1497.6	1193.8	1044.0	967.0	932.8	911.4	907.1	907.1
27.5°	3893.8	3251.9	2062.4	1394.9	1116.8	975.6	915.7	881.4	855.8	847.2	851.5
30°	3992.2	3273.3	1976.8	1305.0	1044.0	924.2	860.0	825.8	800.1	791.6	795.9
32.5°	4090.6	3299.0	1899.8	1223.8	971.3	877.2	813.0	774.5	748.8	744.5	744.5
35°	4197.6	3324.7	1822.8	1155.3	911.4	830.1	770.2	727.4	710.3	701.7	706.0
37.5°	4304.5	3367.5	1750.0	1091.1	868.6	787.3	731.7	688.9	676.1	671.8	671.8
40°	4432.9	3431.6	1720.1	1048.3	830.1	748.8	701.7	658.9	646.1	646.1	646.1
42.5°	4539.9	3483.0	1694.4	1001.3	800.1	714.6	671.8	637.5	629.0	624.7	629.0
45°	4646.8	3530.1	1660.2	958.5	761.6	680.3	646.1	611.9	603.3	603.3	603.3
47.5°	4753.8	3555.7	1613.1	915.7	727.4	650.4	620.4	590.5	581.9	581.9	581.9
50°	4839.4	3577.1	1544.7	868.6	688.9	624.7	594.8	564.8	556.3	556.3	556.3
52.5°	4925.0	3581.4	1471.9	813.0	650.4	594.8	569.1	539.1	530.6	526.3	526.3
55°	5002.0	3577.1	1386.3	748.8	607.6	560.5	539.1	513.5	496.3	479.2	487.8
57.5°	5057.6	3572.8	1287.9	684.6	564.8	526.3	517.7	483.5	449.3	406.5	415.0
60°	5036.2	3525.8	1181.0	603.3	517.7	492.1	492.1	445.0	385.1	363.7	368.0
62.5°	4899.3	3393.1	1069.7	517.7	470.7	457.8	453.6	402.2	355.1	333.8	338.0
65°	4488.5	3059.4	907.1	440.7	423.6	419.3	419.3	372.3	329.5	303.8	308.1
67.5°	3863.8	2567.3	740.2	372.3	376.5	385.1	385.1	342.3	299.5	273.8	278.1
70°	3097.9	2006.8	590.5	320.9	325.2	338.0	346.6	308.1	269.6	243.9	243.9
72.5°	2332.0	1523.3	475.0	269.6	291.0	291.0	303.8	273.8	235.3	209.7	213.9
75°	1690.1	1091.1	376.5	226.8	252.5	248.2	248.2	231.1	201.1	184.0	184.0
77.5°	800.1	573.4	299.5	162.6	196.8	192.5	196.8	184.0	171.2	154.0	158.3
80°	393.7	282.4	192.5	115.5	136.9	141.2	154.0	145.5	141.2	128.4	128.4
82.5°	188.3	111.3	89.9	81.3	94.1	98.4	107.0	107.0	111.3	102.7	102.7
85°	51.3	30.0	38.5	51.3	59.9	64.2	72.7	77.0	77.0	72.7	77.0
87.5°	12.8	12.8	17.1	25.7	30.0	34.2	38.5	38.5	17.1	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)