

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: P840938

Luminaire Tested: **ARCH4-110-727-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840938
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-110-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 920mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12807 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

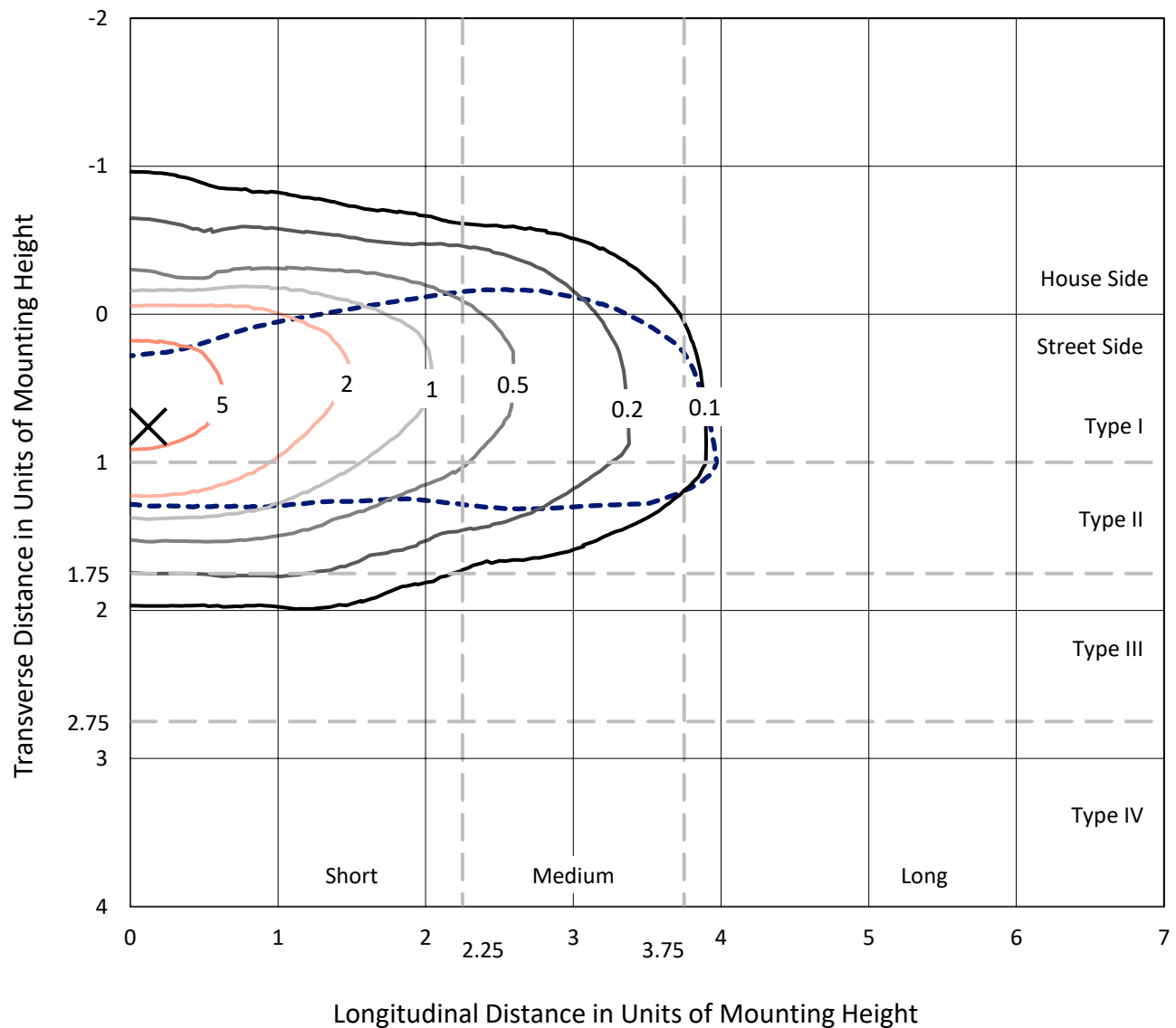
Input Watts (W): 112.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

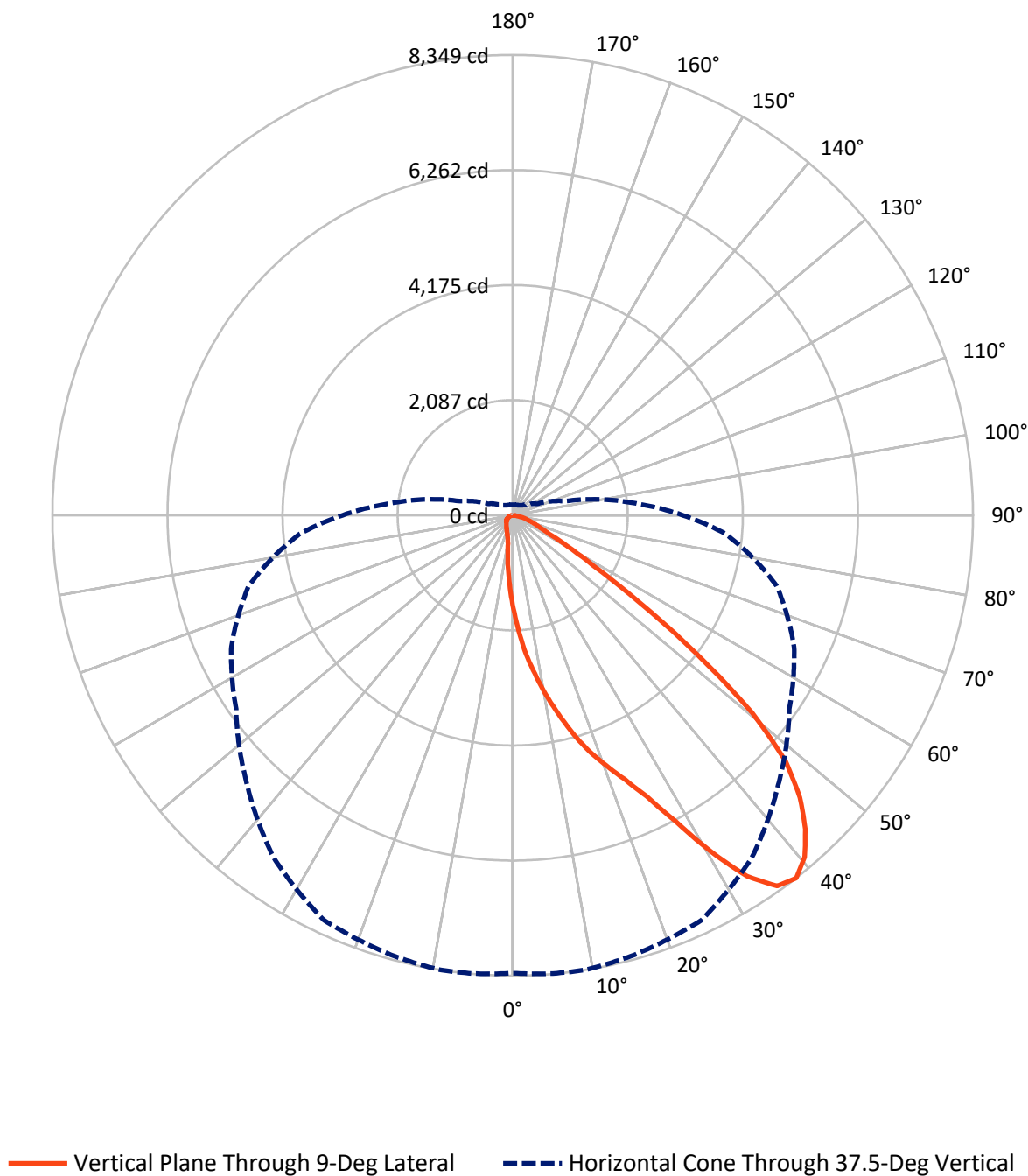
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1557.6	0.0	1557.6
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	11249.4	0.0	11249.4
	% Fixture	87.8	0.0	87.8
Total	Lumens	12807.0	0.0	12807.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.2	1.3
10°-20°	591.4	4.6
20°-30°	1215.3	9.5
30°-40°	2148.1	16.8
40°-50°	2853.5	22.3
50°-60°	2706.4	21.1
60°-70°	2064.8	16.1
70°-80°	1001.0	7.8
80°-90°	56.3	0.4
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°	12807.0	100.0
0°-180°	12807.0	100.0

Coefficient of Utilization



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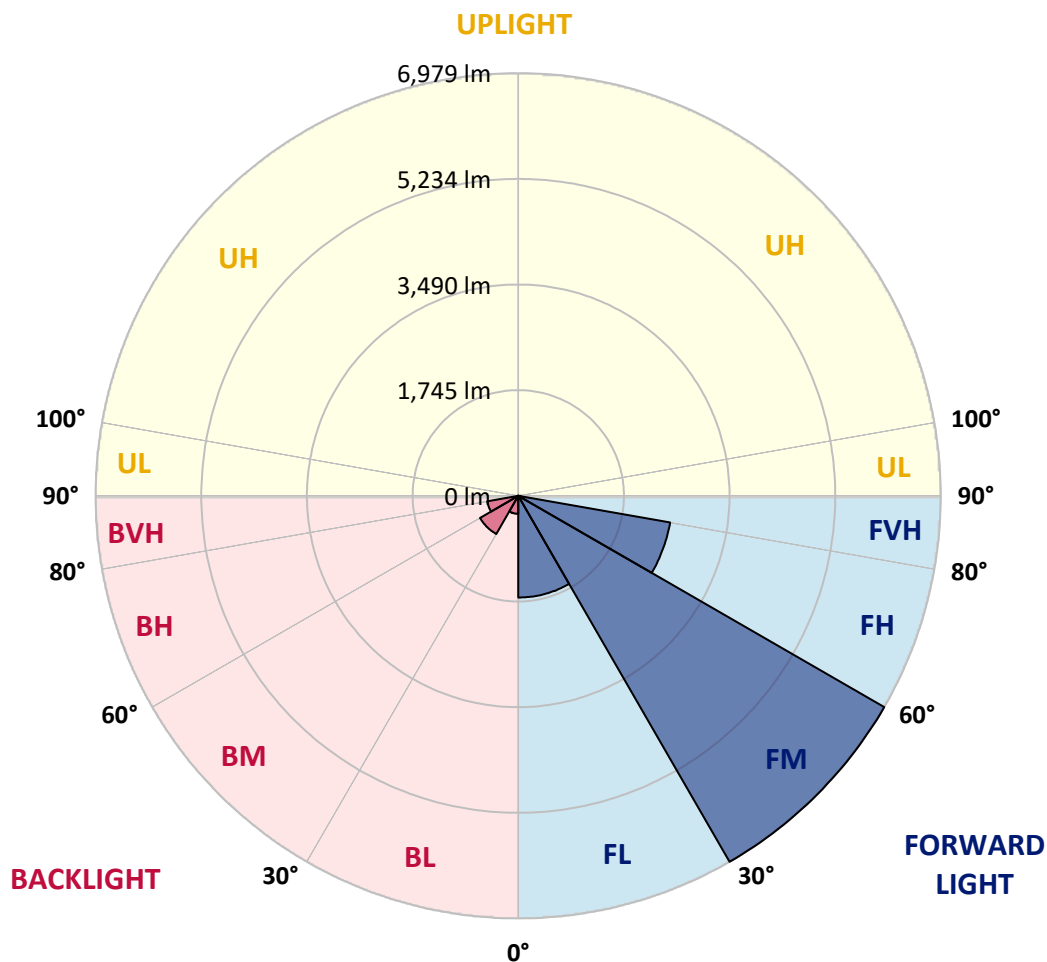
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1679.6	13.1			
FM	(30°-60°)	6979.2	54.5			
FH	(60°-80°)	2546.0	19.9			G2/5000
FVH	(80°-90°)	44.6	0.3			G1/100
BL	(0°-30°)	297.2	2.3	B1/500		
BM	(30°-60°)	728.8	5.7	B1/1000		
BH	(60°-80°)	519.8	4.1	B2/1000		G2/1000
BVH	(80°-90°)	11.7	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1692.9	1692.9	1692.9	1692.9	1692.9	1692.9	1692.9	1692.9	1692.9	1692.9	1692.9
2.5°	2097.8	2061.0	2103.0	2097.8	2061.0	2037.3	1963.7	1940.0	1853.3	1790.2	1735.0
5°	2528.9	2492.1	2528.9	2518.4	2465.8	2408.0	2287.0	2208.2	2053.1	1916.4	1792.8
7.5°	2886.4	2886.4	2902.2	2904.8	2841.7	2752.3	2602.5	2484.2	2266.0	2055.7	1858.5
10°	3272.8	3275.5	3309.6	3286.0	3201.8	3080.9	2891.7	2741.8	2478.9	2202.9	1921.6
12.5°	3685.5	3688.2	3698.7	3688.2	3588.3	3433.2	3204.5	3007.3	2705.0	2371.2	2008.4
15°	4098.3	4100.9	4114.0	4095.6	3985.2	3803.8	3543.6	3301.7	2944.2	2560.4	2113.5
17.5°	4484.7	4489.9	4500.5	4476.8	4361.1	4145.6	3880.1	3588.3	3199.2	2762.8	2231.8
20°	4831.7	4836.9	4844.8	4813.3	4697.6	4482.1	4195.5	3890.6	3459.5	2970.5	2360.6
22.5°	5181.3	5186.6	5199.7	5157.7	5028.8	4781.7	4500.5	4185.0	3735.5	3199.2	2510.5
25°	5628.2	5633.5	5644.0	5583.5	5407.4	5118.2	4821.2	4497.8	4035.2	3456.8	2694.5
27.5°	6282.8	6277.5	6277.5	6167.1	5864.8	5488.9	5144.5	4815.9	4358.5	3732.9	2896.9
30°	7092.4	7079.3	7071.4	6921.6	6490.4	5906.9	5475.7	5113.0	4668.7	4024.7	3115.1
32.5°	7818.0	7818.0	7802.2	7644.5	7187.1	6469.4	5828.0	5402.1	4968.4	4319.1	3341.2
35°	8246.5	8264.9	8257.0	8138.7	7804.8	7074.0	6303.8	5749.1	5283.8	4626.6	3611.9
37.5°	8304.3	8341.1	8349.0	8278.0	8101.9	7568.2	6832.2	6125.0	5630.8	4957.9	3874.8
40°	8070.3	8149.2	8149.2	8138.7	8075.6	7802.2	7276.4	6561.4	5988.3	5302.2	4140.3
42.5°	7710.2	7791.7	7781.2	7820.6	7804.8	7747.0	7526.2	6968.9	6345.9	5657.1	4382.2
45°	7239.6	7323.8	7302.7	7373.7	7405.3	7468.3	7499.9	7252.8	6698.1	6043.6	4652.9
47.5°	6485.2	6627.1	6658.7	6784.9	6916.3	7113.5	7263.3	7355.3	7026.7	6458.9	4947.4
50°	5370.6	5570.4	5633.5	5899.0	6259.1	6666.6	6908.4	7229.1	7258.0	6884.8	5265.4
52.5°	3845.9	4077.2	4174.5	4610.9	5352.2	6062.0	6498.3	6950.5	7347.4	7292.2	5609.8
55°	2486.8	2684.0	2778.6	3188.7	4174.5	5289.1	6014.6	6590.3	7297.5	7665.5	6004.1
57.5°	1532.6	1645.6	1708.7	2061.0	2967.9	4298.0	5381.1	6259.1	7145.0	7988.8	6414.2
60°	1033.1	1098.8	1130.4	1296.0	2016.3	3212.4	4511.0	5912.1	6945.2	8207.0	6787.5
62.5°	686.1	707.1	738.7	841.2	1330.2	2255.5	3464.7	5291.7	6795.4	8220.2	7063.5
65°	531.0	541.5	554.7	599.4	820.2	1577.3	2436.9	4287.5	6571.9	7941.5	7150.3
67.5°	418.0	428.5	444.3	467.9	594.1	1069.9	1658.8	3141.4	6114.5	7505.1	7008.3
70°	328.6	336.5	347.0	368.0	462.7	775.5	1096.2	2087.2	5191.8	7089.8	6561.4
72.5°	260.2	268.1	278.7	299.7	375.9	567.8	751.8	1301.2	4003.6	6582.5	5701.8
75°	205.0	210.3	218.2	239.2	302.3	441.6	510.0	778.1	2720.8	5654.5	4442.6
77.5°	102.5	126.2	144.6	165.6	220.8	304.9	339.1	431.1	1148.8	2902.2	2118.8
80°	60.5	73.6	78.9	92.0	144.6	184.0	184.0	173.5	362.8	1114.6	864.9
82.5°	34.2	47.3	49.9	52.6	86.7	105.2	84.1	63.1	73.6	373.3	252.4
85°	10.5	15.8	18.4	21.0	28.9	31.5	28.9	26.3	21.0	36.8	23.7
87.5°	0.0	0.0	0.0	0.0	2.6	5.3	5.3	5.3	7.9	7.9	7.9
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°	1692.9	1692.9	1692.9	1692.9	1692.9	1692.9	1692.9	1692.9	1692.9	1692.9	1692.9
2.5°	1703.4	1669.3	1603.6	1543.1	1485.3	1443.2	1403.8	1367.0	1340.7	1319.6	1317.0
5°	1727.1	1658.8	1532.6	1414.3	1306.5	1217.1	1140.9	1080.4	1035.7	1004.2	1001.6
7.5°	1758.6	1653.5	1461.6	1285.5	1125.1	996.3	885.9	804.4	746.6	722.9	704.5
10°	1784.9	1648.2	1390.6	1156.7	946.4	783.4	651.9	570.4	528.4	512.6	504.7
12.5°	1829.6	1653.5	1330.2	1038.4	791.3	599.4	499.5	454.8	436.4	423.2	420.6
15°	1895.3	1677.2	1272.3	922.7	633.5	483.7	425.9	396.9	378.5	375.9	373.3
17.5°	1961.1	1698.2	1219.8	804.4	525.8	420.6	381.2	357.5	344.4	341.7	341.7
20°	2037.3	1724.5	1161.9	691.4	449.5	378.5	347.0	328.6	312.8	310.2	310.2
22.5°	2126.7	1761.3	1106.7	591.5	399.6	347.0	320.7	299.7	286.5	283.9	283.9
25°	2247.6	1816.5	1062.0	517.9	365.4	320.7	297.1	278.7	268.1	262.9	262.9
27.5°	2381.7	1892.7	1030.5	473.2	341.7	299.7	276.0	260.2	249.7	244.5	244.5
30°	2531.5	1976.8	1009.4	454.8	328.6	281.3	260.2	244.5	231.3	228.7	228.7
32.5°	2697.1	2074.1	996.3	457.4	326.0	268.1	244.5	228.7	218.2	212.9	212.9
35°	2881.1	2181.9	988.4	473.2	331.2	257.6	231.3	215.6	205.0	199.8	199.8
37.5°	3086.2	2308.1	988.4	489.0	344.4	255.0	218.2	202.4	194.5	189.3	189.3
40°	3278.1	2442.1	998.9	507.4	357.5	255.0	207.7	194.5	184.0	178.8	178.8
42.5°	3427.9	2518.4	1006.8	525.8	365.4	252.4	197.2	184.0	176.1	170.9	170.9
45°	3598.8	2599.9	991.0	533.6	365.4	247.1	189.3	176.1	168.2	163.0	163.0
47.5°	3788.1	2699.8	988.4	538.9	357.5	236.6	181.4	168.2	163.0	157.7	157.7
50°	3980.0	2810.2	993.7	536.3	347.0	220.8	170.9	163.0	155.1	149.8	149.8
52.5°	4198.2	2925.8	1004.2	531.0	323.3	202.4	163.0	155.1	147.2	142.0	139.3
55°	4440.0	3052.0	1025.2	520.5	291.8	184.0	155.1	147.2	136.7	131.4	128.8
57.5°	4718.6	3207.1	1048.9	499.5	257.6	168.2	147.2	136.7	120.9	113.0	110.4
60°	4984.2	3383.2	1075.2	449.5	223.4	152.5	139.3	123.6	107.8	102.5	99.9
62.5°	5233.9	3556.7	1088.3	360.1	189.3	139.3	131.4	113.0	97.3	92.0	89.4
65°	5394.2	3746.0	1059.4	244.5	155.1	128.8	120.9	105.2	89.4	81.5	81.5
67.5°	5404.8	3835.4	959.5	160.4	126.2	115.7	110.4	94.6	78.9	73.6	71.0
70°	5139.3	3701.3	733.4	126.2	105.2	99.9	99.9	84.1	68.3	63.1	60.5
72.5°	4529.4	3278.1	467.9	102.5	89.4	84.1	84.1	71.0	60.5	52.6	49.9
75°	3575.1	2528.9	249.7	84.1	73.6	71.0	65.7	57.8	49.9	44.7	42.1
77.5°	1643.0	1114.6	115.7	60.5	55.2	55.2	49.9	42.1	39.4	34.2	34.2
80°	649.3	378.5	57.8	39.4	36.8	36.8	36.8	28.9	28.9	23.7	21.0
82.5°	178.8	78.9	28.9	23.7	23.7	23.7	21.0	18.4	18.4	15.8	15.8
85°	18.4	13.1	13.1	13.1	13.1	10.5	10.5	7.9	5.3	5.3	5.3
87.5°	7.9	7.9	7.9	7.9	7.9	5.3	2.6	0.0	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)