

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: P842657

Luminaire Tested: **ARCH4-80-722-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842657
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: ARCH4-80-722-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2200K, 685mA 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: 8784 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 83.4
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

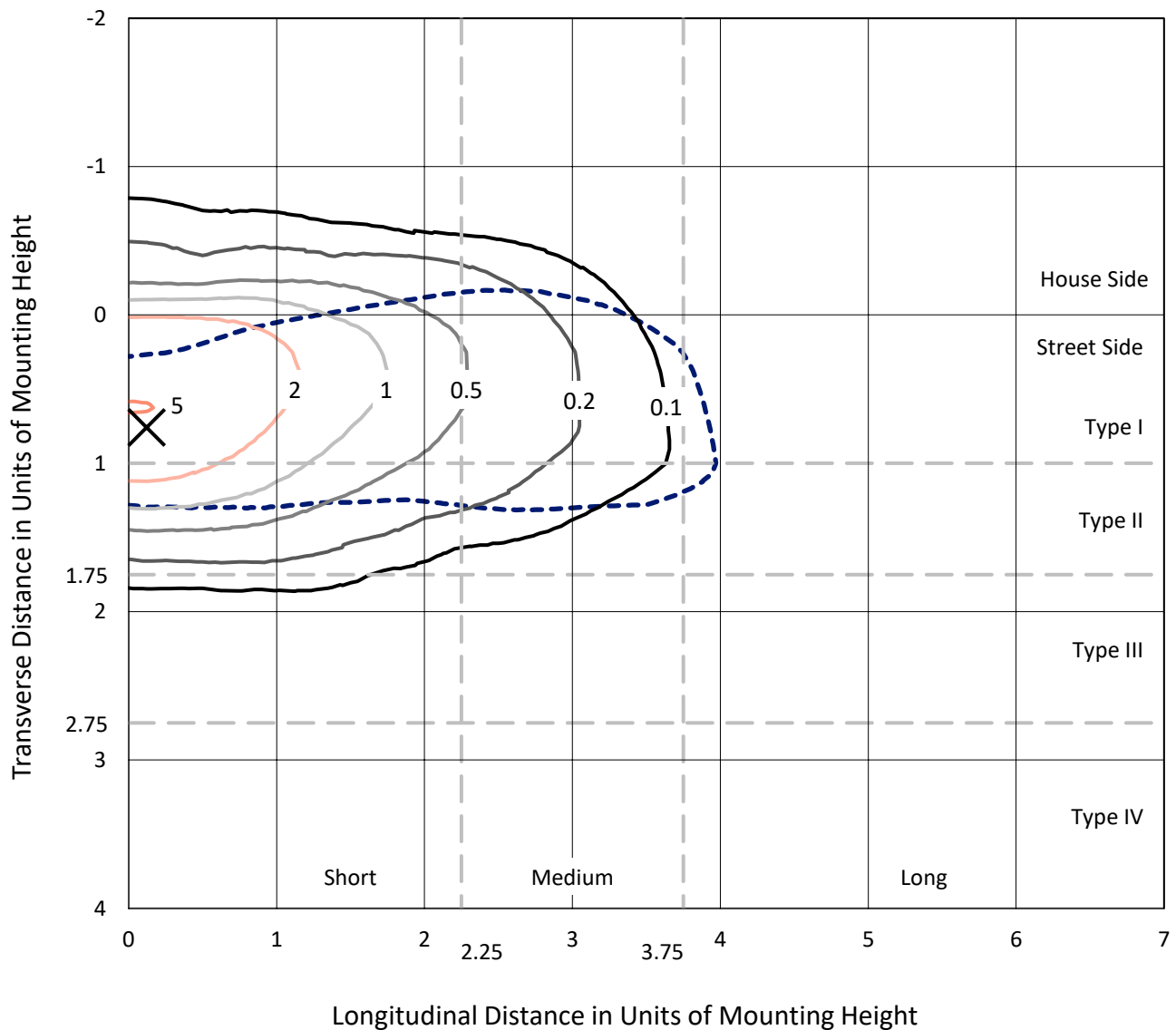


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Iso-Footcandle Lines of Horizontal Illumination

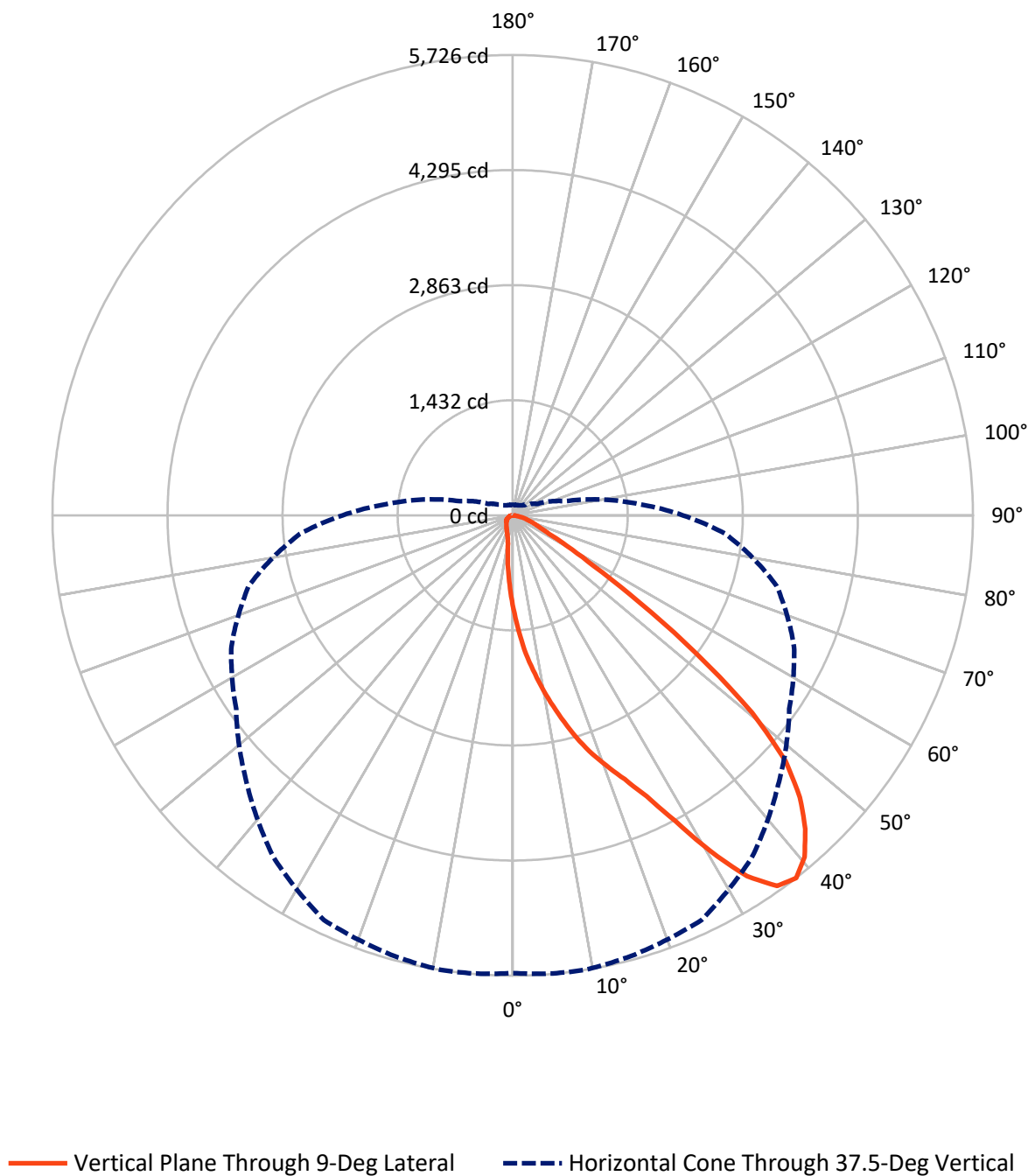
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 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	1068.3	0.0	1068.3
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	7715.7	0.0	7715.7
	% Fixture	87.8	0.0	87.8
Total	Lumens	8784.0	0.0	8784.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.7	1.3
10°-20°	405.7	4.6
20°-30°	833.5	9.5
30°-40°	1473.3	16.8
40°-50°	1957.2	22.3
50°-60°	1856.3	21.1
60°-70°	1416.2	16.1
70°-80°	686.6	7.8
80°-90°	38.6	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°	8784.0	100.0
0°-180°	8784.0	100.0

Coefficient of Utilization



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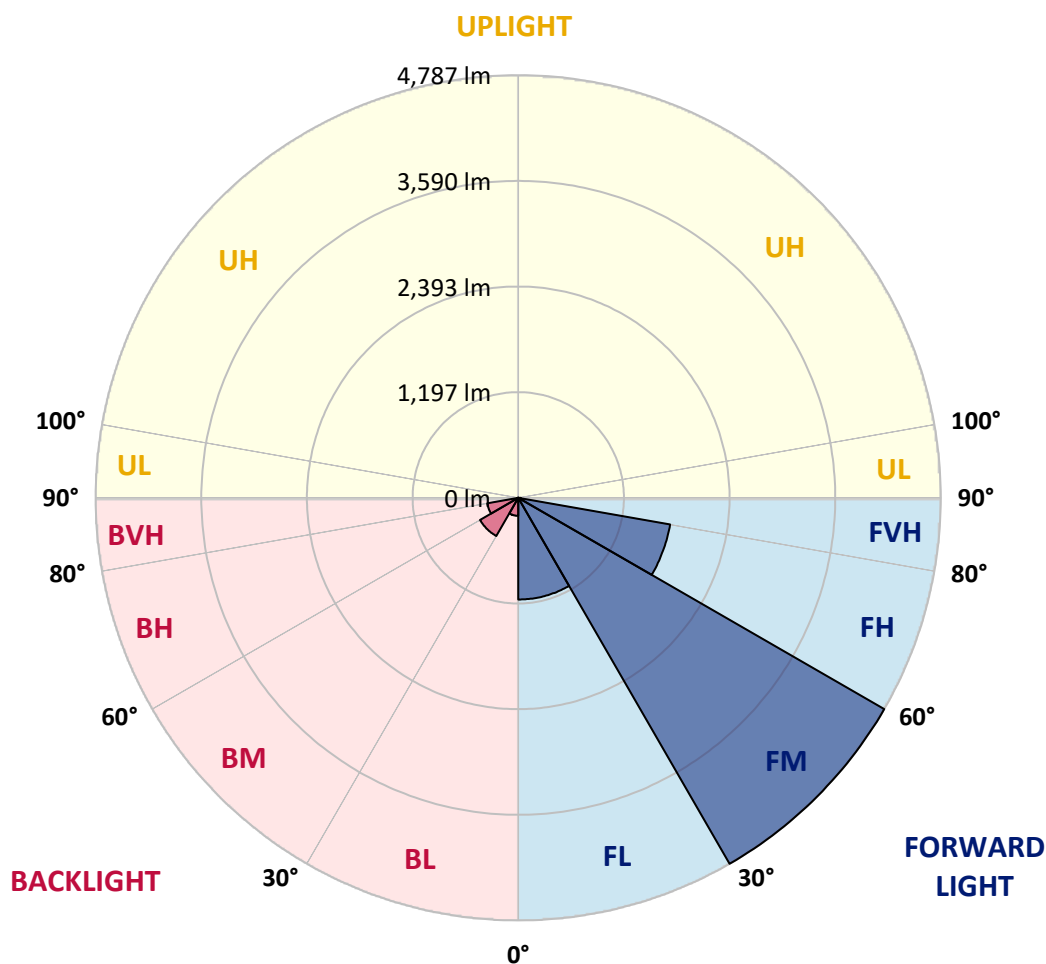
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1152.0	13.1			
FM	(30°-60°)	4786.9	54.5			
FH	(60°-80°)	1746.2	19.9			G1/1800
FVH	(80°-90°)	30.6	0.3			G1/100
BL	(0°-30°)	203.9	2.3	B1/500		
BM	(30°-60°)	499.9	5.7	B1/1000		
BH	(60°-80°)	356.5	4.1	B1/500		G1/500
BVH	(80°-90°)	8.0	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1
2.5°	1438.8	1413.6	1442.4	1438.8	1413.6	1397.3	1346.8	1330.6	1271.1	1227.8	1190.0
5°	1734.5	1709.3	1734.5	1727.3	1691.2	1651.6	1568.6	1514.5	1408.2	1314.4	1229.7
7.5°	1979.7	1979.7	1990.5	1992.3	1949.1	1887.8	1785.0	1703.8	1554.2	1410.0	1274.7
10°	2244.7	2246.6	2270.0	2253.8	2196.1	2113.1	1983.3	1880.5	1700.2	1510.9	1318.0
12.5°	2527.8	2529.6	2536.8	2529.6	2461.1	2354.7	2197.9	2062.6	1855.3	1626.3	1377.5
15°	2810.9	2812.7	2821.7	2809.1	2733.4	2609.0	2430.5	2264.6	2019.4	1756.1	1449.6
17.5°	3075.9	3079.5	3086.8	3070.5	2991.2	2843.3	2661.2	2461.1	2194.3	1895.0	1530.8
20°	3313.9	3317.5	3322.9	3301.3	3222.0	3074.1	2877.6	2668.5	2372.8	2037.4	1619.1
22.5°	3553.7	3557.3	3566.4	3537.5	3449.2	3279.7	3086.8	2870.4	2562.1	2194.3	1721.9
25°	3860.2	3863.9	3871.1	3829.6	3708.8	3510.5	3306.7	3085.0	2767.6	2371.0	1848.1
27.5°	4309.2	4305.6	4305.6	4229.9	4022.5	3764.7	3528.5	3303.1	2989.4	2560.3	1986.9
30°	4864.5	4855.5	4850.1	4747.3	4451.6	4051.4	3755.7	3506.9	3202.1	2760.4	2136.6
32.5°	5362.2	5362.2	5351.3	5243.2	4929.4	4437.2	3997.3	3705.2	3407.7	2962.3	2291.6
35°	5656.0	5668.7	5663.3	5582.1	5353.1	4851.9	4323.6	3943.2	3624.1	3173.3	2477.3
37.5°	5695.7	5721.0	5726.4	5677.7	5556.9	5190.9	4686.0	4201.0	3862.0	3400.5	2657.6
40°	5535.2	5589.3	5589.3	5582.1	5538.8	5351.3	4990.7	4500.3	4107.3	3636.7	2839.7
42.5°	5288.2	5344.1	5336.9	5364.0	5353.1	5313.5	5162.0	4779.8	4352.5	3880.1	3005.6
45°	4965.5	5023.2	5008.8	5057.4	5079.1	5122.4	5144.0	4974.5	4594.1	4145.1	3191.3
47.5°	4448.0	4545.4	4567.0	4653.6	4743.7	4878.9	4981.7	5044.8	4819.4	4430.0	3393.3
50°	3683.5	3820.6	3863.9	4046.0	4293.0	4572.4	4738.3	4958.3	4978.1	4722.1	3611.4
52.5°	2637.8	2796.5	2863.2	3162.5	3670.9	4157.7	4457.0	4767.2	5039.4	5001.6	3847.6
55°	1705.6	1840.9	1905.8	2187.1	2863.2	3627.7	4125.3	4520.1	5005.2	5257.6	4118.1
57.5°	1051.2	1128.7	1172.0	1413.6	2035.6	2947.9	3690.8	4293.0	4900.6	5479.3	4399.3
60°	708.6	753.7	775.3	888.9	1382.9	2203.3	3094.0	4055.0	4763.6	5629.0	4655.4
62.5°	470.6	485.0	506.6	577.0	912.3	1547.0	2376.4	3629.5	4660.8	5638.0	4844.7
65°	364.2	371.4	380.4	411.1	562.5	1081.8	1671.4	2940.7	4507.5	5446.9	4904.2
67.5°	286.7	293.9	304.7	320.9	407.5	733.8	1137.7	2154.6	4193.8	5147.6	4806.8
70°	225.4	230.8	238.0	252.4	317.3	531.9	751.9	1431.6	3560.9	4862.7	4500.3
72.5°	178.5	183.9	191.1	205.5	257.8	389.5	515.7	892.5	2746.0	4514.7	3910.7
75°	140.6	144.2	149.6	164.1	207.3	302.9	349.8	533.7	1866.1	3878.3	3047.1
77.5°	70.3	86.5	99.2	113.6	151.5	209.1	232.6	295.7	787.9	1990.5	1453.2
80°	41.5	50.5	54.1	63.1	99.2	126.2	126.2	119.0	248.8	764.5	593.2
82.5°	23.4	32.5	34.3	36.1	59.5	72.1	57.7	43.3	50.5	256.0	173.1
85°	7.2	10.8	12.6	14.4	19.8	21.6	19.8	18.0	14.4	25.2	16.2
87.5°	0.0	0.0	0.0	0.0	1.8	3.6	3.6	3.6	5.4	5.4	5.4
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°	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1
2.5°	1168.4	1144.9	1099.8	1058.4	1018.7	989.9	962.8	937.6	919.5	905.1	903.3
5°	1184.6	1137.7	1051.2	970.0	896.1	834.8	782.5	741.0	710.4	688.7	686.9
7.5°	1206.2	1134.1	1002.5	881.7	771.7	683.3	607.6	551.7	512.1	495.8	483.2
10°	1224.2	1130.5	953.8	793.3	649.1	537.3	447.1	391.3	362.4	351.6	346.2
12.5°	1254.9	1134.1	912.3	712.2	542.7	411.1	342.6	311.9	299.3	290.3	288.5
15°	1300.0	1150.3	872.7	632.9	434.5	331.8	292.1	272.3	259.6	257.8	256.0
17.5°	1345.0	1164.7	836.6	551.7	360.6	288.5	261.4	245.2	236.2	234.4	234.4
20°	1397.3	1182.8	796.9	474.2	308.3	259.6	238.0	225.4	214.6	212.8	212.8
22.5°	1458.6	1208.0	759.1	405.7	274.1	238.0	220.0	205.5	196.5	194.7	194.7
25°	1541.6	1245.9	728.4	355.2	250.6	220.0	203.7	191.1	183.9	180.3	180.3
27.5°	1633.5	1298.2	706.8	324.5	234.4	205.5	189.3	178.5	171.3	167.7	167.7
30°	1736.3	1355.9	692.4	311.9	225.4	192.9	178.5	167.7	158.7	156.9	156.9
32.5°	1849.9	1422.6	683.3	313.7	223.6	183.9	167.7	156.9	149.6	146.0	146.0
35°	1976.1	1496.5	677.9	324.5	227.2	176.7	158.7	147.8	140.6	137.0	137.0
37.5°	2116.7	1583.0	677.9	335.4	236.2	174.9	149.6	138.8	133.4	129.8	129.8
40°	2248.4	1675.0	685.1	348.0	245.2	174.9	142.4	133.4	126.2	122.6	122.6
42.5°	2351.1	1727.3	690.6	360.6	250.6	173.1	135.2	126.2	120.8	117.2	117.2
45°	2468.3	1783.2	679.7	366.0	250.6	169.5	129.8	120.8	115.4	111.8	111.8
47.5°	2598.1	1851.7	677.9	369.6	245.2	162.3	124.4	115.4	111.8	108.2	108.2
50°	2729.8	1927.4	681.5	367.8	238.0	151.5	117.2	111.8	106.4	102.8	102.8
52.5°	2879.4	2006.8	688.7	364.2	221.8	138.8	111.8	106.4	101.0	97.4	95.6
55°	3045.3	2093.3	703.2	357.0	200.1	126.2	106.4	101.0	93.8	90.2	88.3
57.5°	3236.4	2199.7	719.4	342.6	176.7	115.4	101.0	93.8	82.9	77.5	75.7
60°	3418.5	2320.5	737.4	308.3	153.3	104.6	95.6	84.7	73.9	70.3	68.5
62.5°	3589.8	2439.5	746.4	247.0	129.8	95.6	90.2	77.5	66.7	63.1	61.3
65°	3699.8	2569.3	726.6	167.7	106.4	88.3	82.9	72.1	61.3	55.9	55.9
67.5°	3707.0	2630.6	658.1	110.0	86.5	79.3	75.7	64.9	54.1	50.5	48.7
70°	3524.9	2538.6	503.0	86.5	72.1	68.5	68.5	57.7	46.9	43.3	41.5
72.5°	3106.6	2248.4	320.9	70.3	61.3	57.7	57.7	48.7	41.5	36.1	34.3
75°	2452.1	1734.5	171.3	57.7	50.5	48.7	45.1	39.7	34.3	30.7	28.8
77.5°	1126.9	764.5	79.3	41.5	37.9	37.9	34.3	28.8	27.0	23.4	23.4
80°	445.3	259.6	39.7	27.0	25.2	25.2	25.2	19.8	19.8	16.2	14.4
82.5°	122.6	54.1	19.8	16.2	16.2	16.2	14.4	12.6	12.6	10.8	10.8
85°	12.6	9.0	9.0	9.0	9.0	7.2	7.2	5.4	3.6	3.6	3.6
87.5°	5.4	5.4	5.4	5.4	5.4	3.6	1.8	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)