

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: P842747

Luminaire Tested: **ARCH4-90-730-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842747
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: ARCH4-90-730-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 765mA 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: 11137 lumens
Efficiency: N/A
Efficacy: 119.6 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 93.1
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

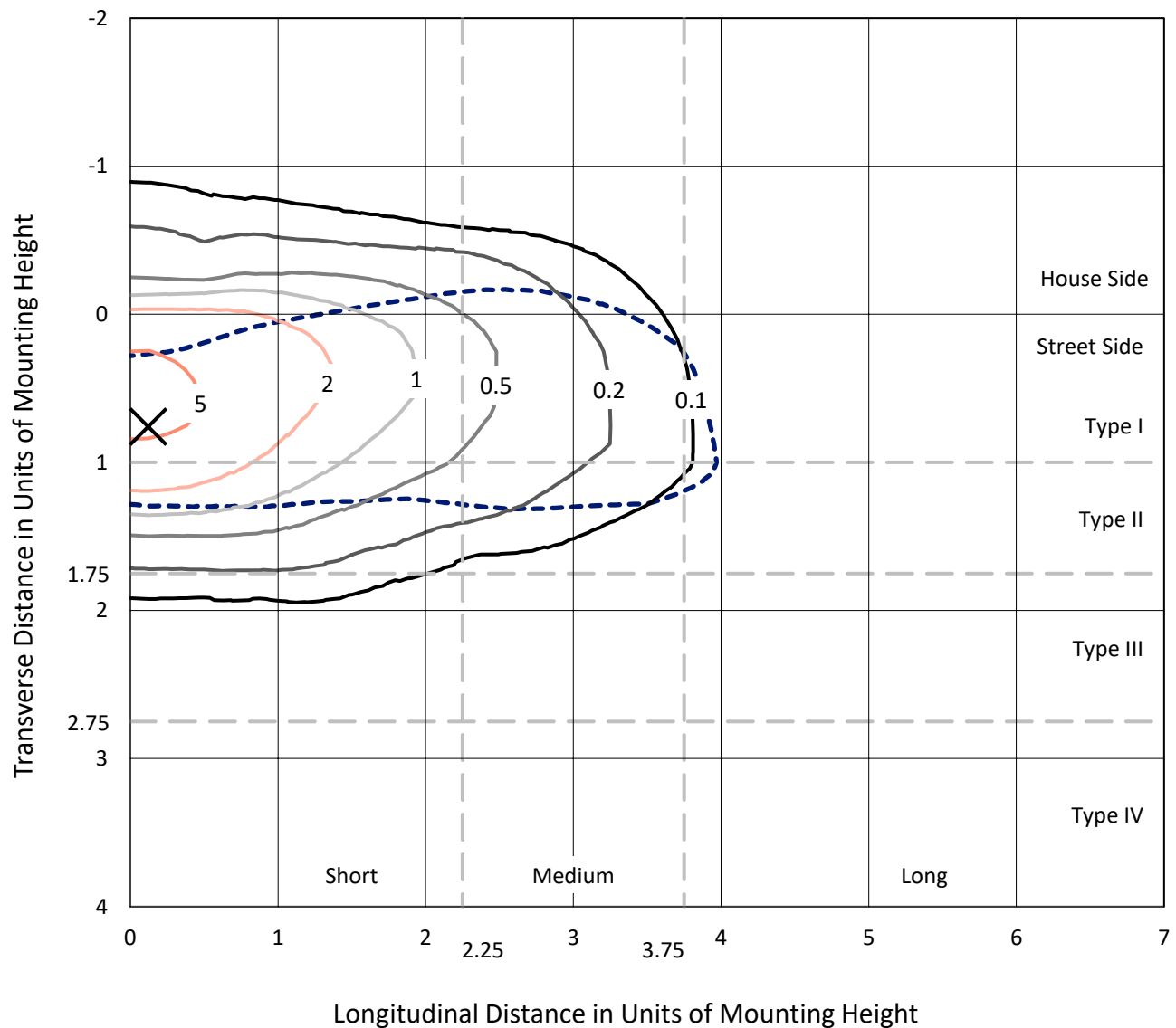


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

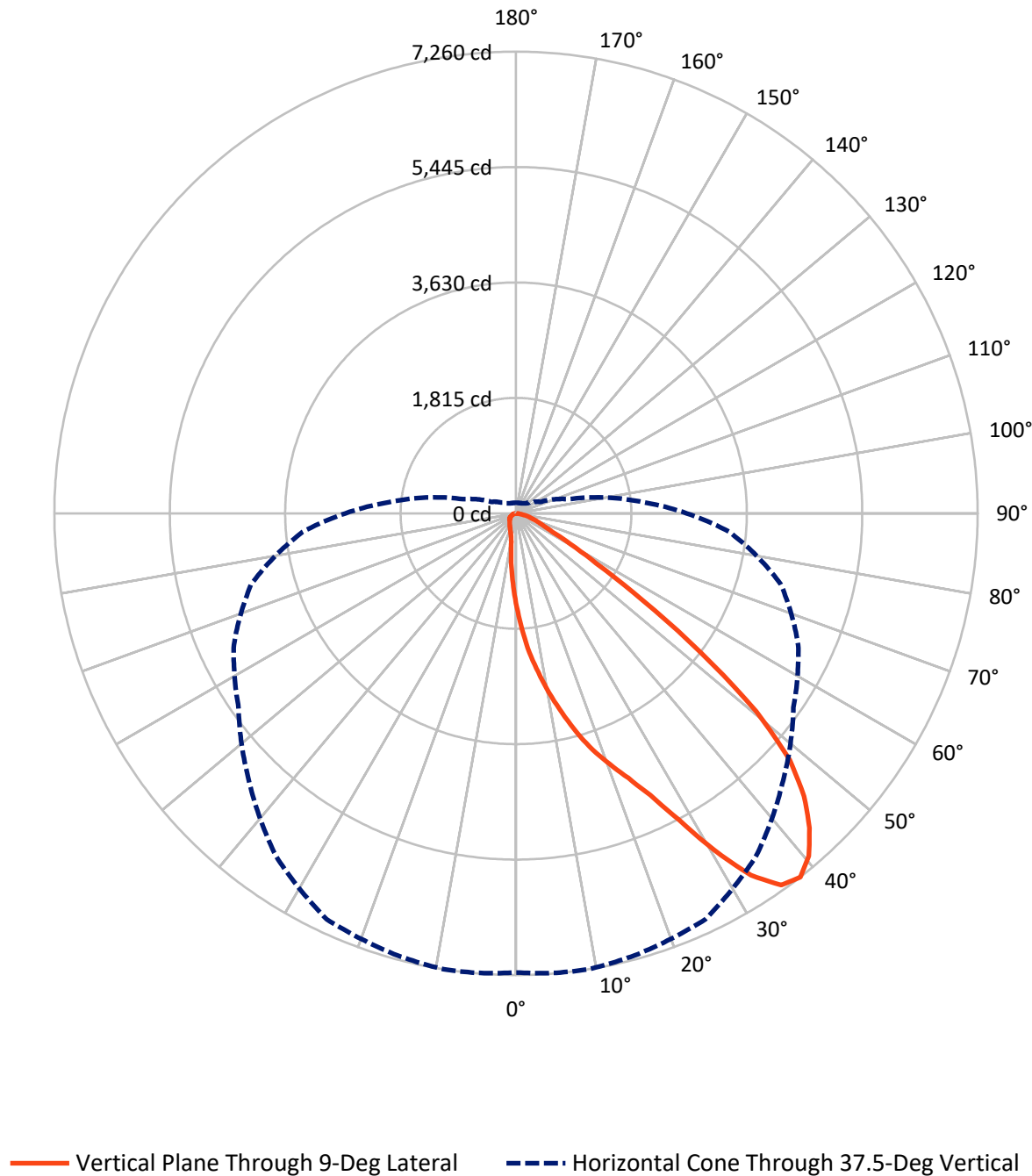


Based on 25 foot mounting height. Maximum calculated value = 6.5 fc

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	1354.5	0.0	1354.5
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	9782.5	0.0	9782.5
	% Fixture	87.8	0.0	87.8
Total	Lumens	11137.0	0.0	11137.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.0	1.3
10°-20°	514.3	4.6
20°-30°	1056.8	9.5
30°-40°	1868.0	16.8
40°-50°	2481.5	22.3
50°-60°	2353.5	21.1
60°-70°	1795.5	16.1
70°-80°	870.5	7.8
80°-90°	49.0	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°	11137.0	100.0
0°-180°	11137.0	100.0

Coefficient of Utilization



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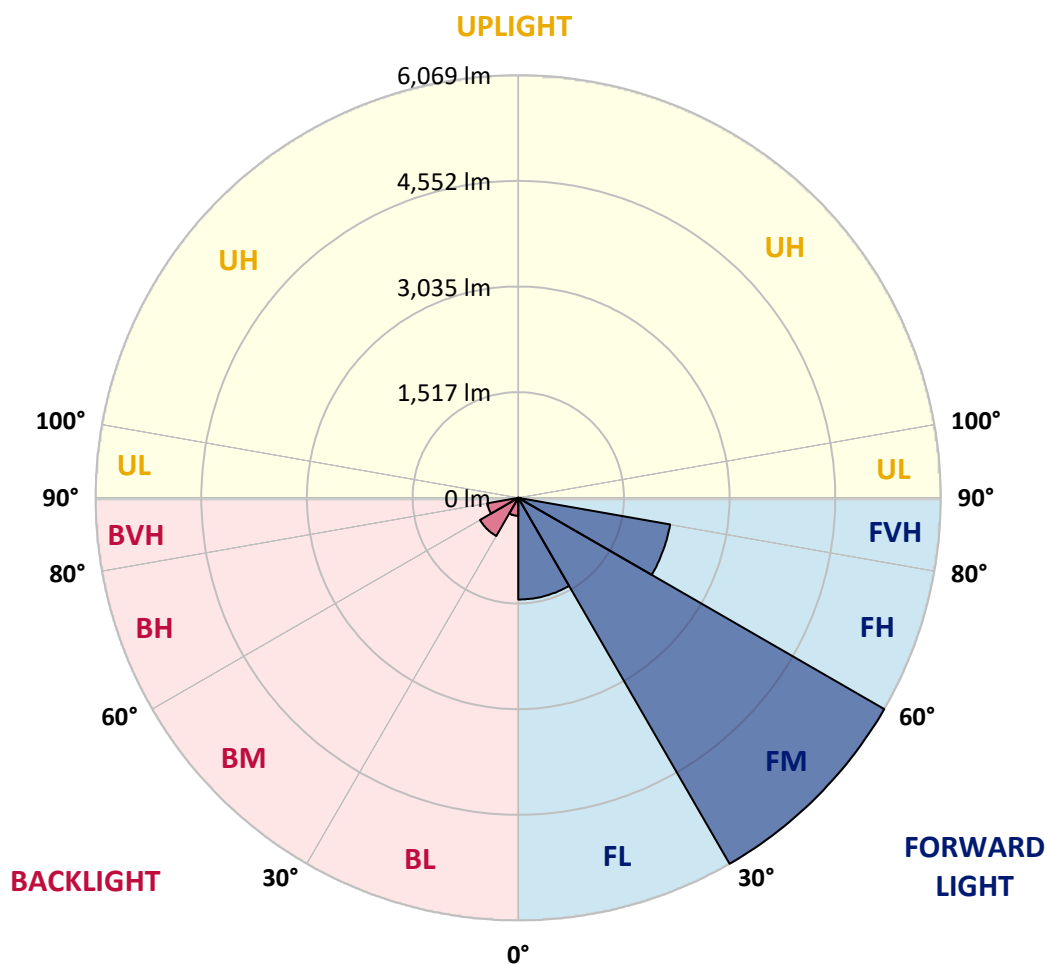
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1460.6	13.1			
FM	(30°-60°)	6069.1	54.5			
FH	(60°-80°)	2214.0	19.9			G2/5000
FVH	(80°-90°)	38.8	0.3			G1/100
BL	(0°-30°)	258.5	2.3	B1/500		
BM	(30°-60°)	633.8	5.7	B1/1000		
BH	(60°-80°)	452.0	4.1	B1/500		G1/500
BVH	(80°-90°)	10.2	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1472.2	1472.2	1472.2	1472.2	1472.2	1472.2	1472.2	1472.2	1472.2	1472.2	1472.2
2.5°	1824.2	1792.2	1828.8	1824.2	1792.2	1771.6	1707.6	1687.1	1611.6	1556.8	1508.8
5°	2199.1	2167.1	2199.1	2190.0	2144.3	2094.0	1988.8	1920.2	1785.4	1666.5	1559.0
7.5°	2510.0	2510.0	2523.7	2526.0	2471.2	2393.4	2263.1	2160.3	1970.5	1787.6	1616.2
10°	2846.1	2848.3	2878.1	2857.5	2784.3	2679.2	2514.6	2384.3	2155.7	1915.7	1671.1
12.5°	3205.0	3207.2	3216.4	3207.2	3120.4	2985.5	2786.6	2615.2	2352.3	2062.0	1746.5
15°	3563.9	3566.1	3577.6	3561.6	3465.6	3307.8	3081.5	2871.2	2560.3	2226.6	1837.9
17.5°	3899.9	3904.5	3913.6	3893.0	3792.5	3605.0	3374.1	3120.4	2782.0	2402.6	1940.8
20°	4201.6	4206.2	4213.1	4185.6	4085.1	3897.6	3648.4	3383.3	3008.4	2583.2	2052.8
22.5°	4505.7	4510.3	4521.7	4485.1	4373.1	4158.2	3913.6	3639.3	3248.4	2782.0	2183.1
25°	4894.3	4898.9	4908.0	4855.4	4702.3	4450.8	4192.5	3911.3	3509.0	3006.1	2343.1
27.5°	5463.5	5458.9	5458.9	5362.9	5100.0	4773.1	4473.7	4187.9	3790.2	3246.1	2519.2
30°	6167.6	6156.2	6149.3	6019.0	5644.1	5136.6	4761.7	4446.2	4059.9	3499.8	2708.9
32.5°	6798.5	6798.5	6784.8	6647.7	6249.9	5625.8	5068.0	4697.7	4320.5	3755.9	2905.5
35°	7171.1	7187.1	7180.3	7077.4	6787.1	6151.6	5481.8	4999.5	4594.8	4023.3	3140.9
37.5°	7221.4	7253.4	7260.3	7198.6	7045.4	6581.4	5941.3	5326.4	4896.6	4311.4	3369.5
40°	7018.0	7086.6	7086.6	7077.4	7022.6	6784.8	6327.6	5705.8	5207.5	4610.8	3600.4
42.5°	6704.8	6775.7	6766.5	6800.8	6787.1	6736.8	6544.8	6060.2	5518.4	4919.4	3810.7
45°	6295.6	6368.8	6350.5	6412.2	6439.6	6494.5	6521.9	6307.0	5824.7	5255.5	4046.2
47.5°	5639.5	5763.0	5790.4	5900.1	6014.4	6185.9	6316.2	6396.2	6110.4	5616.7	4302.2
50°	4670.3	4844.0	4898.9	5129.8	5442.9	5797.3	6007.6	6286.5	6311.6	5987.0	4578.8
52.5°	3344.4	3545.6	3630.1	4009.6	4654.3	5271.5	5651.0	6044.2	6389.3	6341.3	4878.3
55°	2162.5	2334.0	2416.3	2772.9	3630.1	4599.4	5230.3	5731.0	6345.9	6665.9	5221.2
57.5°	1332.7	1431.0	1485.9	1792.2	2580.9	3737.6	4679.4	5442.9	6213.3	6947.1	5577.8
60°	898.4	955.5	983.0	1127.0	1753.4	2793.5	3922.8	5141.2	6039.6	7136.9	5902.4
62.5°	596.6	614.9	642.4	731.5	1156.7	1961.4	3012.9	4601.7	5909.3	7148.3	6142.5
65°	461.8	470.9	482.3	521.2	713.2	1371.6	2119.1	3728.4	5715.0	6906.0	6217.9
67.5°	363.5	372.6	386.3	406.9	516.6	930.4	1442.5	2731.8	5317.2	6526.5	6094.4
70°	285.7	292.6	301.8	320.0	402.3	674.4	953.3	1815.1	4514.8	6165.3	5705.8
72.5°	226.3	233.2	242.3	260.6	326.9	493.8	653.8	1131.6	3481.6	5724.1	4958.3
75°	178.3	182.9	189.7	208.0	262.9	384.0	443.5	676.7	2366.0	4917.2	3863.3
77.5°	89.2	109.7	125.7	144.0	192.0	265.2	294.9	374.9	999.0	2523.7	1842.5
80°	52.6	64.0	68.6	80.0	125.7	160.0	160.0	150.9	315.5	969.3	752.1
82.5°	29.7	41.1	43.4	45.7	75.4	91.4	73.2	54.9	64.0	324.6	219.5
85°	9.1	13.7	16.0	18.3	25.1	27.4	25.1	22.9	18.3	32.0	20.6
87.5°	0.0	0.0	0.0	0.0	2.3	4.6	4.6	4.6	6.9	6.9	6.9
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°	1472.2	1472.2	1472.2	1472.2	1472.2	1472.2	1472.2	1472.2	1472.2	1472.2	1472.2
2.5°	1481.3	1451.6	1394.5	1341.9	1291.6	1255.0	1220.7	1188.7	1165.9	1147.6	1145.3
5°	1501.9	1442.5	1332.7	1229.9	1136.1	1058.4	992.1	939.5	900.7	873.2	871.0
7.5°	1529.3	1437.9	1271.0	1117.8	978.4	866.4	770.4	699.5	649.2	628.6	612.6
10°	1552.2	1433.3	1209.3	1005.8	823.0	681.2	566.9	496.1	459.5	445.8	438.9
12.5°	1591.0	1437.9	1156.7	903.0	688.1	521.2	434.3	395.5	379.5	368.0	365.8
15°	1648.2	1458.5	1106.4	802.4	550.9	420.6	370.3	345.2	329.2	326.9	324.6
17.5°	1705.3	1476.7	1060.7	699.5	457.2	365.8	331.5	310.9	299.5	297.2	297.2
20°	1771.6	1499.6	1010.4	601.2	390.9	329.2	301.8	285.7	272.0	269.7	269.7
22.5°	1849.4	1531.6	962.4	514.3	347.5	301.8	278.9	260.6	249.2	246.9	246.9
25°	1954.5	1579.6	923.5	450.3	317.8	278.9	258.3	242.3	233.2	228.6	228.6
27.5°	2071.1	1645.9	896.1	411.5	297.2	260.6	240.0	226.3	217.2	212.6	212.6
30°	2201.4	1719.1	877.8	395.5	285.7	244.6	226.3	212.6	201.2	198.9	198.9
32.5°	2345.4	1803.6	866.4	397.8	283.5	233.2	212.6	198.9	189.7	185.2	185.2
35°	2505.4	1897.4	859.5	411.5	288.0	224.0	201.2	187.5	178.3	173.7	173.7
37.5°	2683.8	2007.1	859.5	425.2	299.5	221.7	189.7	176.0	169.2	164.6	164.6
40°	2850.6	2123.7	868.7	441.2	310.9	221.7	180.6	169.2	160.0	155.4	155.4
42.5°	2980.9	2190.0	875.5	457.2	317.8	219.5	171.4	160.0	153.2	148.6	148.6
45°	3129.5	2260.8	861.8	464.1	317.8	214.9	164.6	153.2	146.3	141.7	141.7
47.5°	3294.1	2347.7	859.5	468.6	310.9	205.7	157.7	146.3	141.7	137.2	137.2
50°	3461.0	2443.7	864.1	466.3	301.8	192.0	148.6	141.7	134.9	130.3	130.3
52.5°	3650.7	2544.3	873.2	461.8	281.2	176.0	141.7	134.9	128.0	123.4	121.2
55°	3861.0	2654.0	891.5	452.6	253.7	160.0	134.9	128.0	118.9	114.3	112.0
57.5°	4103.3	2788.9	912.1	434.3	224.0	146.3	128.0	118.9	105.2	98.3	96.0
60°	4334.2	2942.1	935.0	390.9	194.3	132.6	121.2	107.4	93.7	89.2	86.9
62.5°	4551.4	3092.9	946.4	313.2	164.6	121.2	114.3	98.3	84.6	80.0	77.7
65°	4690.8	3257.5	921.3	212.6	134.9	112.0	105.2	91.4	77.7	70.9	70.9
67.5°	4700.0	3335.3	834.4	139.4	109.7	100.6	96.0	82.3	68.6	64.0	61.7
70°	4469.1	3218.7	637.8	109.7	91.4	86.9	86.9	73.2	59.4	54.9	52.6
72.5°	3938.8	2850.6	406.9	89.2	77.7	73.2	73.2	61.7	52.6	45.7	43.4
75°	3108.9	2199.1	217.2	73.2	64.0	61.7	57.1	50.3	43.4	38.9	36.6
77.5°	1428.7	969.3	100.6	52.6	48.0	48.0	43.4	36.6	34.3	29.7	29.7
80°	564.6	329.2	50.3	34.3	32.0	32.0	32.0	25.1	25.1	20.6	18.3
82.5°	155.4	68.6	25.1	20.6	20.6	20.6	18.3	16.0	16.0	13.7	13.7
85°	16.0	11.4	11.4	11.4	11.4	9.1	9.1	6.9	4.6	4.6	4.6
87.5°	6.9	6.9	6.9	6.9	6.9	4.6	2.3	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)