

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: P841721

Luminaire Tested: **ARCH4-220-722-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841721
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: ARCH4-220-722-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2200K, 870mA 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: 20411 lumens
Efficiency: N/A
Efficacy: 92.0 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

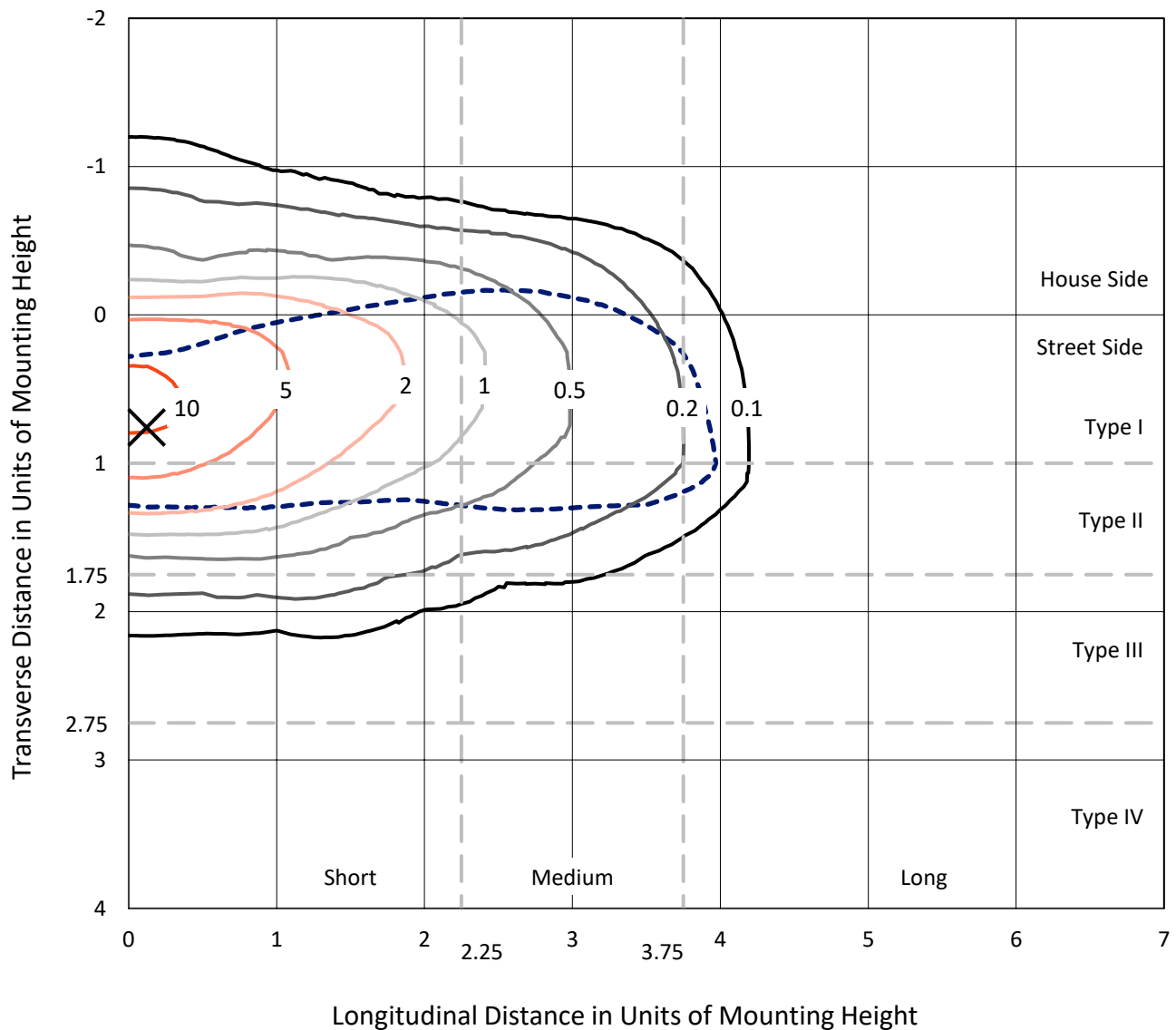
Input Watts (W): 221.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

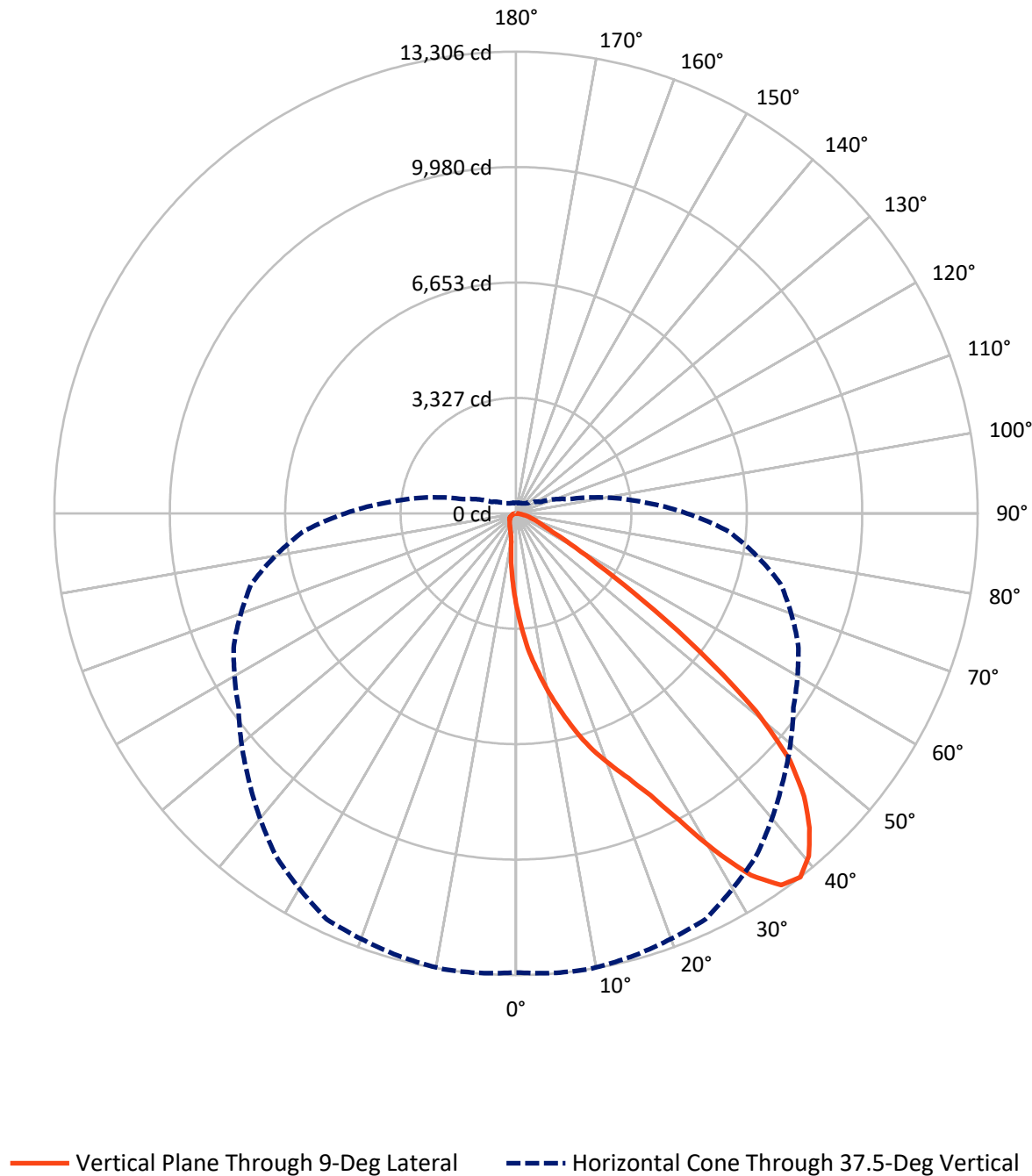
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.9 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	2482.3	0.0	2482.3
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	17928.7	0.0	17928.7
	% Fixture	87.8	0.0	87.8
Total	Lumens	20411.0	0.0	20411.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.2	1.3
10°-20°	942.6	4.6
20°-30°	1936.8	9.5
30°-40°	3423.5	16.8
40°-50°	4547.8	22.3
50°-60°	4313.3	21.1
60°-70°	3290.7	16.1
70°-80°	1595.3	7.8
80°-90°	89.8	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°	20411.0	100.0
0°-180°	20411.0	100.0

Coefficient of Utilization



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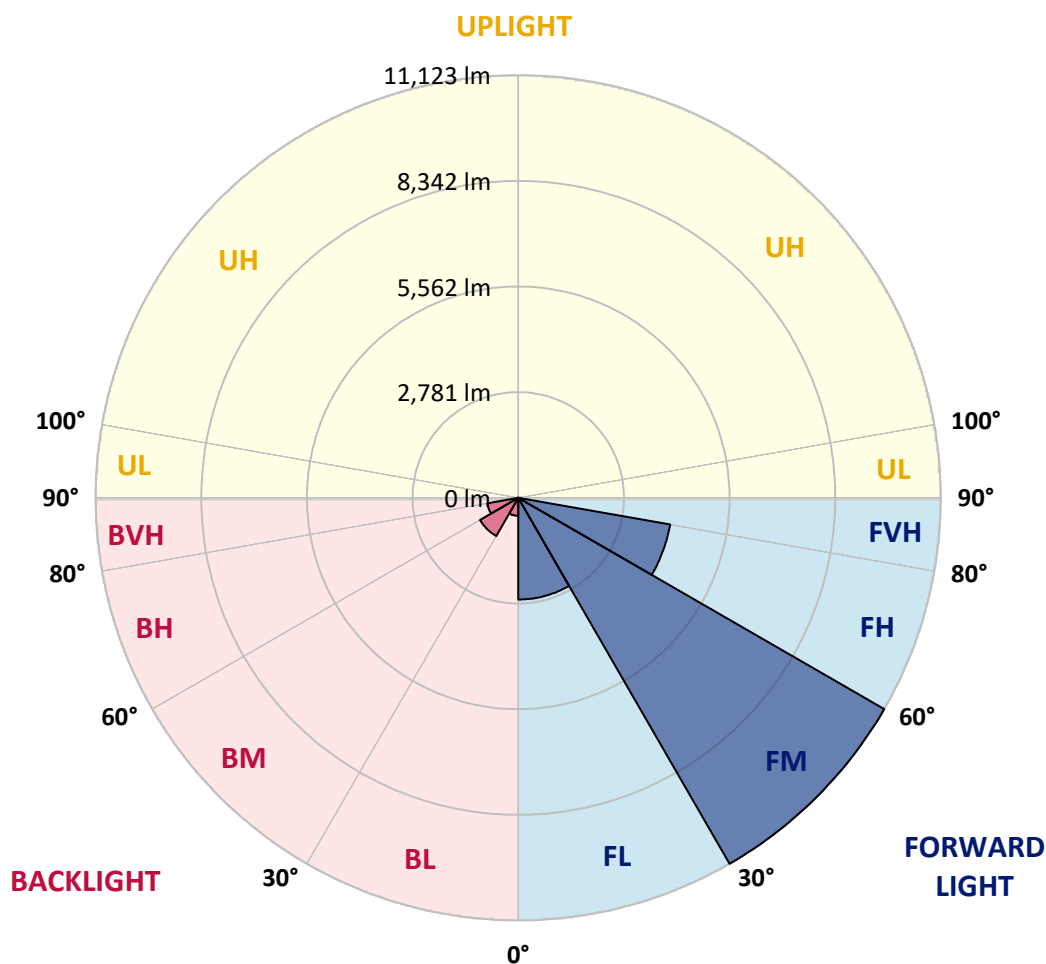
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2676.9	13.1			
FM	(30°-60°)	11123.0	54.5			
FH	(60°-80°)	4057.6	19.9			G2/5000
FVH	(80°-90°)	71.1	0.3			G1/100
BL	(0°-30°)	473.7	2.3	B1/500		
BM	(30°-60°)	1161.6	5.7	B2/2500		
BH	(60°-80°)	828.3	4.1	B2/1000		G2/1000
BVH	(80°-90°)	18.7	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°	2698.1	2698.1	2698.1	2698.1	2698.1	2698.1	2698.1	2698.1	2698.1	2698.1	2698.1
2.5°	3343.3	3284.6	3351.7	3343.3	3284.6	3246.9	3129.6	3091.9	2953.7	2853.1	2765.1
5°	4030.4	3971.7	4030.4	4013.6	3929.8	3837.7	3644.9	3519.2	3272.1	3054.2	2857.3
7.5°	4600.2	4600.2	4625.3	4629.5	4528.9	4386.5	4147.7	3959.1	3611.4	3276.2	2962.0
10°	5216.0	5220.2	5274.7	5237.0	5102.9	4910.2	4608.5	4369.7	3950.8	3510.9	3062.6
12.5°	5873.8	5878.0	5894.7	5878.0	5718.8	5471.6	5107.1	4792.9	4311.1	3779.0	3200.8
15°	6531.5	6535.7	6556.7	6527.4	6351.4	6062.3	5647.5	5262.1	4692.3	4080.6	3368.4
17.5°	7147.4	7155.8	7172.6	7134.8	6950.5	6607.0	6183.8	5718.8	5098.7	4403.2	3557.0
20°	7700.4	7708.8	7721.4	7671.1	7486.8	7143.2	6686.6	6200.6	5513.5	4734.2	3762.2
22.5°	8257.7	8266.0	8287.0	8219.9	8014.7	7620.8	7172.6	6669.8	5953.4	5098.7	4001.0
25°	8969.9	8978.3	8995.0	8898.7	8618.0	8157.1	7683.7	7168.4	6431.0	5509.3	4294.3
27.5°	10013.1	10004.7	10004.7	9828.7	9346.9	8747.8	8199.0	7675.3	6946.3	5949.2	4616.9
30°	11303.5	11282.5	11270.0	11031.2	10344.1	9414.0	8726.9	8148.7	7440.7	6414.2	4964.6
32.5°	12459.8	12459.8	12434.7	12183.3	11454.3	10310.5	9288.3	8609.6	7918.3	6883.5	5325.0
35°	13142.7	13172.0	13159.5	12970.9	12438.9	11274.2	10046.6	9162.6	8421.0	7373.7	5756.5
37.5°	13234.9	13293.5	13306.1	13193.0	12912.3	12061.8	10888.7	9761.7	8974.1	7901.5	6175.4
40°	12862.0	12987.7	12987.7	12970.9	12870.4	12434.7	11596.7	10457.2	9543.9	8450.4	6598.6
42.5°	12288.0	12417.9	12401.1	12464.0	12438.9	12346.7	11994.8	11106.6	10113.6	9016.0	6984.0
45°	11538.1	11672.2	11638.6	11751.8	11802.0	11902.6	11952.9	11559.0	10675.0	9631.8	7415.6
47.5°	10335.7	10561.9	10612.2	10813.3	11022.8	11337.0	11575.8	11722.4	11198.7	10293.8	7884.8
50°	8559.3	8877.7	8978.3	9401.4	9975.4	10624.8	11010.2	11521.3	11567.4	10972.5	8391.7
52.5°	6129.4	6498.0	6653.0	7348.5	8530.0	9661.2	10356.6	11077.2	11709.9	11621.9	8940.6
55°	3963.3	4277.6	4428.4	5082.0	6653.0	8429.4	9585.8	10503.3	11630.3	12216.8	9569.0
57.5°	2442.5	2622.7	2723.2	3284.6	4730.0	6850.0	8576.1	9975.4	11387.3	12732.1	10222.6
60°	1646.5	1751.2	1801.5	2065.5	3213.4	5119.7	7189.3	9422.4	11068.9	13079.9	10817.5
62.5°	1093.5	1127.0	1177.3	1340.7	2119.9	3594.7	5521.9	8433.6	10830.1	13100.8	11257.4
65°	846.3	863.1	884.0	955.2	1307.1	2513.7	3883.7	6833.2	10473.9	12656.7	11395.6
67.5°	666.1	682.9	708.0	745.7	946.8	1705.2	2643.6	5006.5	9745.0	11961.2	11169.4
70°	523.7	536.3	553.0	586.5	737.4	1235.9	1747.1	3326.5	8274.4	11299.3	10457.2
72.5°	414.8	427.3	444.1	477.6	599.1	904.9	1198.2	2073.8	6380.7	10490.7	9087.2
75°	326.8	335.2	347.7	381.3	481.8	703.8	812.8	1240.1	4336.2	9011.8	7080.4
77.5°	163.4	201.1	230.4	263.9	351.9	486.0	540.5	687.1	1830.8	4625.3	3376.8
80°	96.4	117.3	125.7	146.6	230.4	293.3	293.3	276.5	578.2	1776.4	1378.4
82.5°	54.5	75.4	79.6	83.8	138.3	167.6	134.1	100.5	117.3	594.9	402.2
85°	16.8	25.1	29.3	33.5	46.1	50.3	46.1	41.9	33.5	58.7	37.7
87.5°	0.0	0.0	0.0	0.0	4.2	8.4	8.4	8.4	12.6	12.6	12.6
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°	2698.1	2698.1	2698.1	2698.1	2698.1	2698.1	2698.1	2698.1	2698.1	2698.1	2698.1
2.5°	2714.8	2660.4	2555.6	2459.3	2367.1	2300.1	2237.2	2178.6	2136.7	2103.2	2099.0
5°	2752.6	2643.6	2442.5	2254.0	2082.2	1939.8	1818.3	1721.9	1650.7	1600.4	1596.2
7.5°	2802.8	2635.2	2329.4	2048.7	1793.1	1587.8	1411.9	1282.0	1189.8	1152.1	1122.8
10°	2844.7	2626.9	2216.3	1843.4	1508.2	1248.5	1039.0	909.1	842.1	817.0	804.4
12.5°	2915.9	2635.2	2119.9	1654.9	1261.1	955.2	796.0	724.8	695.5	674.5	670.3
15°	3020.7	2672.9	2027.8	1470.5	1009.7	770.9	678.7	632.6	603.3	599.1	594.9
17.5°	3125.4	2706.5	1944.0	1282.0	837.9	670.3	607.5	569.8	548.8	544.6	544.6
20°	3246.9	2748.4	1851.8	1101.9	716.4	603.3	553.0	523.7	498.6	494.4	494.4
22.5°	3389.4	2807.0	1763.8	942.7	636.8	553.0	511.1	477.6	456.7	452.5	452.5
25°	3582.1	2895.0	1692.6	825.3	582.4	511.1	473.4	444.1	427.3	419.0	419.0
27.5°	3795.8	3016.5	1642.3	754.1	544.6	477.6	439.9	414.8	398.0	389.6	389.6
30°	4034.6	3150.6	1608.8	724.8	523.7	448.3	414.8	389.6	368.7	364.5	364.5
32.5°	4298.5	3305.6	1587.8	729.0	519.5	427.3	389.6	364.5	347.7	339.4	339.4
35°	4591.8	3477.3	1575.3	754.1	527.9	410.6	368.7	343.5	326.8	318.4	318.4
37.5°	4918.6	3678.4	1575.3	779.3	548.8	406.4	347.7	322.6	310.0	301.6	301.6
40°	5224.4	3892.1	1592.0	808.6	569.8	406.4	331.0	310.0	293.3	284.9	284.9
42.5°	5463.2	4013.6	1604.6	837.9	582.4	402.2	314.2	293.3	280.7	272.3	272.3
45°	5735.5	4143.5	1579.5	850.5	582.4	393.8	301.6	280.7	268.1	259.8	259.8
47.5°	6037.2	4302.7	1575.3	858.9	569.8	377.1	289.1	268.1	259.8	251.4	251.4
50°	6343.0	4478.7	1583.7	854.7	553.0	351.9	272.3	259.8	247.2	238.8	238.8
52.5°	6690.8	4663.0	1600.4	846.3	515.3	322.6	259.8	247.2	234.6	226.2	222.0
55°	7076.2	4864.1	1633.9	829.5	465.0	293.3	247.2	234.6	217.9	209.5	205.3
57.5°	7520.3	5111.3	1671.6	796.0	410.6	268.1	234.6	217.9	192.7	180.2	176.0
60°	7943.4	5392.0	1713.5	716.4	356.1	243.0	222.0	196.9	171.8	163.4	159.2
62.5°	8341.4	5668.5	1734.5	574.0	301.6	222.0	209.5	180.2	155.0	146.6	142.4
65°	8597.0	5970.1	1688.4	389.6	247.2	205.3	192.7	167.6	142.4	129.9	129.9
67.5°	8613.8	6112.6	1529.2	255.6	201.1	184.3	176.0	150.8	125.7	117.3	113.1
70°	8190.6	5898.9	1168.9	201.1	167.6	159.2	159.2	134.1	108.9	100.5	96.4
72.5°	7218.6	5224.4	745.7	163.4	142.4	134.1	134.1	113.1	96.4	83.8	79.6
75°	5697.8	4030.4	398.0	134.1	117.3	113.1	104.7	92.2	79.6	71.2	67.0
77.5°	2618.5	1776.4	184.3	96.4	88.0	88.0	79.6	67.0	62.8	54.5	54.5
80°	1034.8	603.3	92.2	62.8	58.7	58.7	58.7	46.1	46.1	37.7	33.5
82.5°	284.9	125.7	46.1	37.7	37.7	37.7	33.5	29.3	29.3	25.1	25.1
85°	29.3	20.9	20.9	20.9	20.9	16.8	16.8	12.6	8.4	8.4	8.4
87.5°	12.6	12.6	12.6	12.6	12.6	8.4	4.2	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)