

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: P800178

Luminaire Tested: **ARCH2-80-740-U-T2R-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P800178
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-80-740-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 630mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8212 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 84.3
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

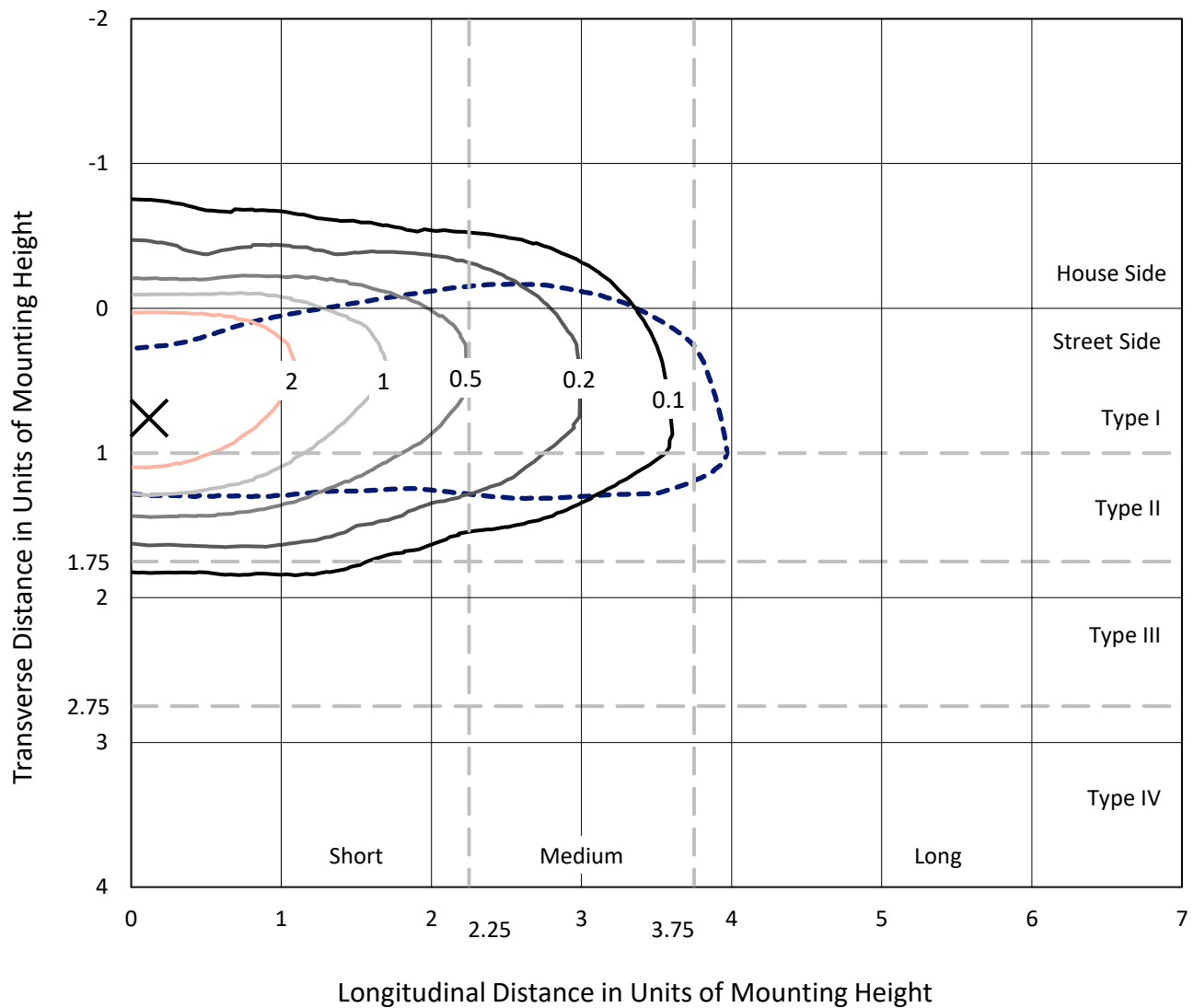


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Iso-Footcandle Lines of Horizontal Illumination

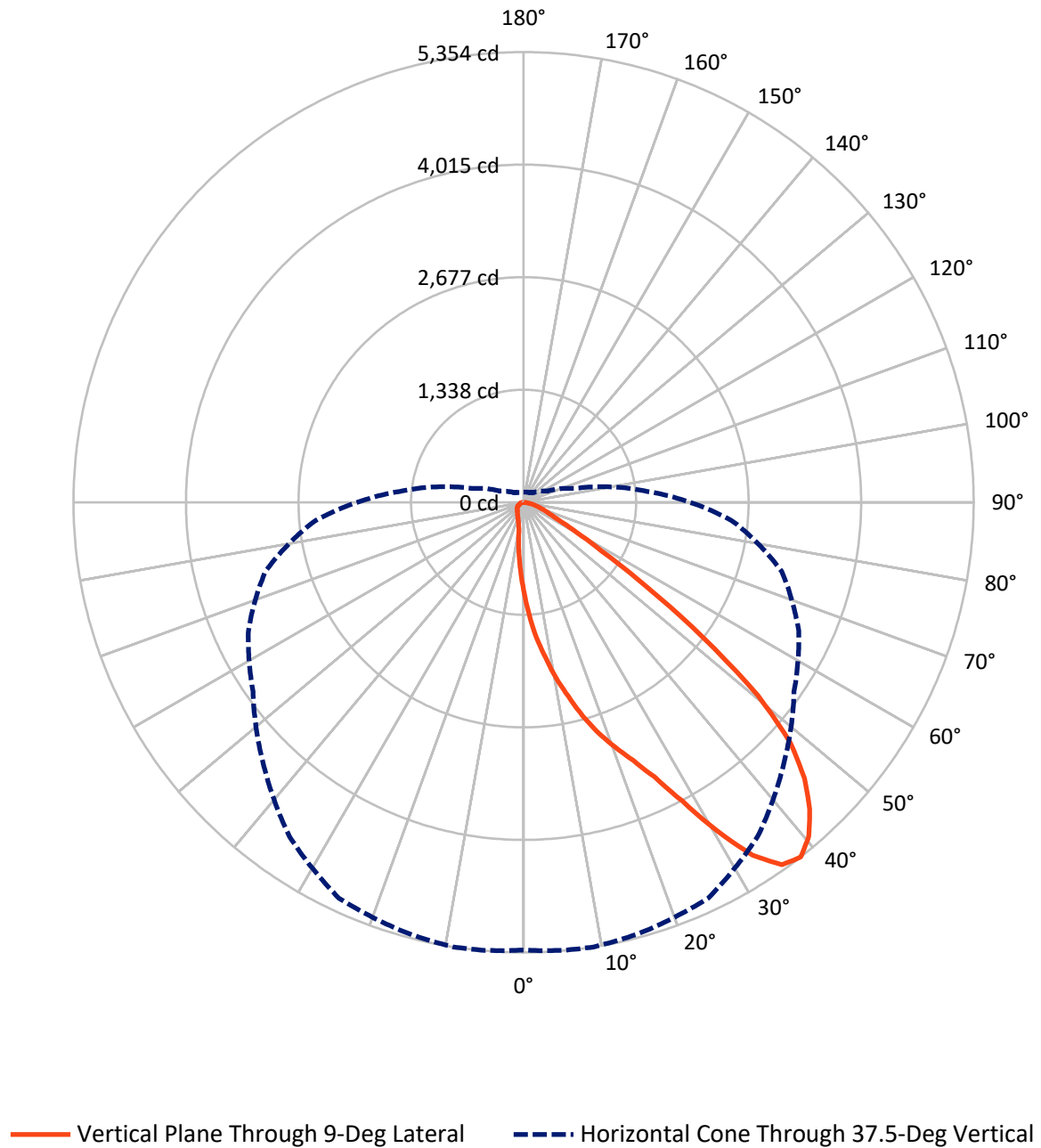
✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 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	998.7	0.0	998.7
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	7213.3	0.0	7213.3
	% Fixture	87.8	0.0	87.8
Total	Lumens	8212.0	0.0	8212.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.1	1.3
10°-20°	379.2	4.6
20°-30°	779.2	9.5
30°-40°	1377.4	16.8
40°-50°	1829.7	22.3
50°-60°	1735.4	21.1
60°-70°	1323.9	16.1
70°-80°	641.8	7.8
80°-90°	36.1	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°	8212.0	100.0
0°-180°	8212.0	100.0

Coefficient of Utilization



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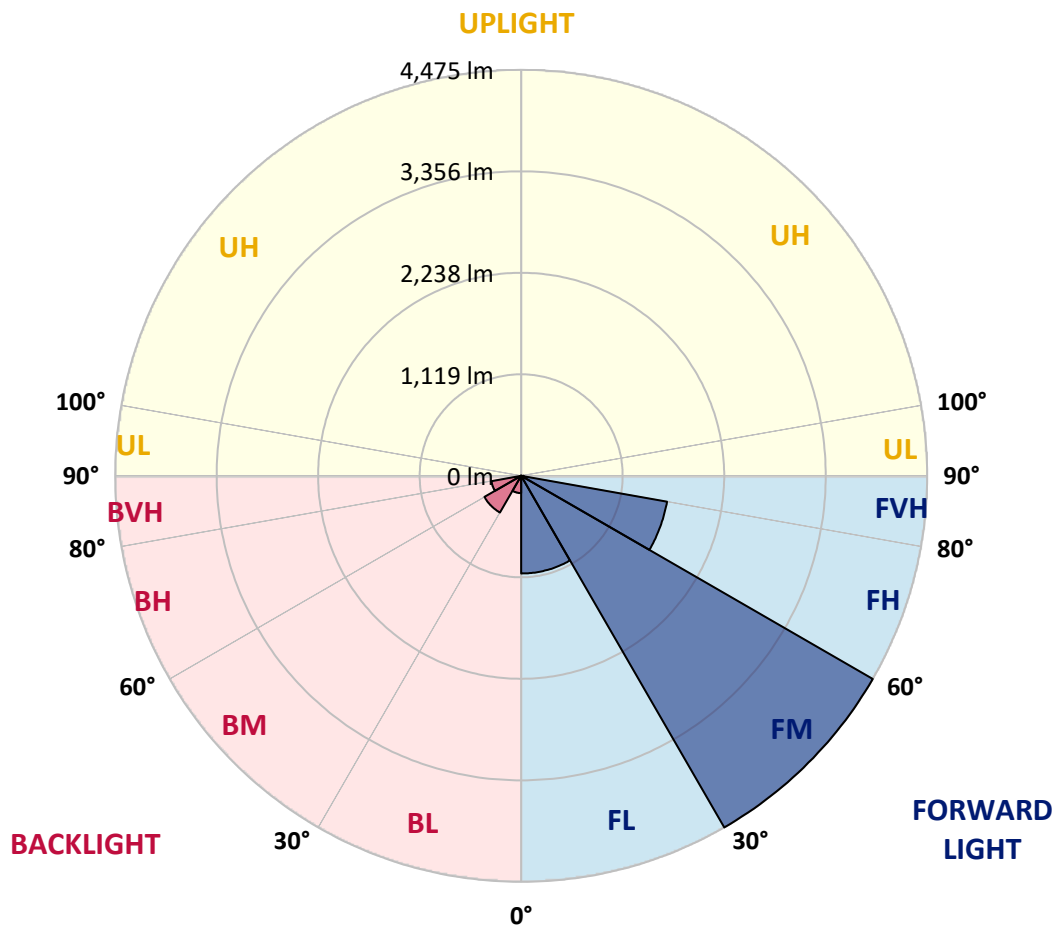
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1077.0	13.1			
FM	(30°-60°)	4475.1	54.5			
FH	(60°-80°)	1632.5	19.9			G1/1800
FVH	(80°-90°)	28.6	0.3			G1/100
BL	(0°-30°)	190.6	2.3	B1/500		
BM	(30°-60°)	467.3	5.7	B1/1000		
BH	(60°-80°)	333.3	4.1	B1/500		G1/500
BVH	(80°-90°)	7.5	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°	1085.5	1085.5	1085.5	1085.5	1085.5	1085.5	1085.5	1085.5	1085.5	1085.5	1085.5
2.5°	1345.1	1321.5	1348.5	1345.1	1321.5	1306.3	1259.1	1244.0	1188.3	1147.9	1112.5
5°	1621.5	1597.9	1621.5	1614.8	1581.1	1544.0	1466.5	1415.9	1316.5	1228.8	1149.6
7.5°	1850.8	1850.8	1860.9	1862.6	1822.1	1764.8	1668.7	1592.9	1453.0	1318.1	1191.7
10°	2098.6	2100.3	2122.2	2107.0	2053.1	1975.5	1854.2	1758.1	1589.5	1412.5	1232.2
12.5°	2363.2	2364.9	2371.6	2364.9	2300.8	2201.4	2054.7	1928.3	1734.5	1520.4	1287.8
15°	2627.9	2629.5	2638.0	2626.2	2555.4	2439.1	2272.2	2117.1	1887.9	1641.8	1355.2
17.5°	2875.6	2879.0	2885.7	2870.6	2796.4	2658.2	2487.9	2300.8	2051.4	1771.6	1431.1
20°	3098.1	3101.5	3106.6	3086.3	3012.2	2873.9	2690.2	2494.7	2218.3	1904.7	1513.7
22.5°	3322.3	3325.7	3334.1	3307.1	3224.6	3066.1	2885.7	2683.5	2395.2	2051.4	1609.7
25°	3608.9	3612.2	3619.0	3580.2	3467.3	3281.9	3091.4	2884.1	2587.4	2216.6	1727.7
27.5°	4028.6	4025.2	4025.2	3954.4	3760.6	3519.5	3298.7	3088.0	2794.7	2393.6	1857.5
30°	4547.8	4539.3	4534.3	4438.2	4161.7	3787.5	3511.1	3278.5	2993.6	2580.7	1997.4
32.5°	5013.0	5013.0	5002.9	4901.7	4608.4	4148.3	3737.0	3463.9	3185.8	2769.4	2142.4
35°	5287.7	5299.5	5294.5	5218.6	5004.5	4536.0	4042.1	3686.4	3388.1	2966.7	2316.0
37.5°	5324.8	5348.4	5353.5	5308.0	5195.0	4852.8	4380.9	3927.5	3610.6	3179.0	2484.6
40°	5174.8	5225.4	5225.4	5218.6	5178.2	5002.9	4665.7	4207.3	3839.8	3399.9	2654.8
42.5°	4943.9	4996.1	4989.4	5014.7	5004.5	4967.5	4825.9	4468.5	4069.0	3627.4	2809.9
45°	4642.1	4696.1	4682.6	4728.1	4748.3	4788.8	4809.0	4650.6	4294.9	3875.2	2983.5
47.5°	4158.4	4249.4	4269.6	4350.5	4434.8	4561.2	4657.3	4716.3	4505.6	4141.5	3172.3
50°	3443.7	3571.8	3612.2	3782.5	4013.4	4274.7	4429.8	4635.4	4653.9	4414.6	3376.3
52.5°	2466.0	2614.4	2676.7	2956.5	3431.9	3887.0	4166.8	4456.7	4711.3	4675.9	3597.1
55°	1594.6	1721.0	1781.7	2044.6	2676.7	3391.4	3856.7	4225.8	4679.2	4915.2	3849.9
57.5°	982.7	1055.2	1095.6	1321.5	1903.0	2756.0	3450.4	4013.4	4581.5	5122.5	4112.9
60°	662.4	704.6	724.8	831.0	1292.9	2059.8	2892.5	3790.9	4453.4	5262.4	4352.2
62.5°	439.9	453.4	473.7	539.4	852.9	1446.2	2221.6	3393.1	4357.3	5270.9	4529.2
65°	340.5	347.2	355.7	384.3	525.9	1011.4	1562.6	2749.2	4214.0	5092.2	4584.8
67.5°	268.0	274.8	284.9	300.0	380.9	686.0	1063.6	2014.3	3920.7	4812.4	4493.8
70°	210.7	215.8	222.5	236.0	296.7	497.3	702.9	1338.4	3329.1	4546.1	4207.3
72.5°	166.9	171.9	178.7	192.2	241.0	364.1	482.1	834.4	2567.2	4220.7	3656.1
75°	131.5	134.8	139.9	153.4	193.8	283.2	327.0	498.9	1744.6	3625.7	2848.7
77.5°	65.7	80.9	92.7	106.2	141.6	195.5	217.4	276.4	736.6	1860.9	1358.6
80°	38.8	47.2	50.6	59.0	92.7	118.0	118.0	111.2	232.6	714.7	554.6
82.5°	21.9	30.3	32.0	33.7	55.6	67.4	53.9	40.5	47.2	239.4	161.8
85°	6.7	10.1	11.8	13.5	18.5	20.2	18.5	16.9	13.5	23.6	15.2
87.5°	0.0	0.0	0.0	0.0	1.7	3.4	3.4	3.4	5.1	5.1	5.1
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°	1085.5	1085.5	1085.5	1085.5	1085.5	1085.5	1085.5	1085.5	1085.5	1085.5	1085.5
2.5°	1092.3	1070.4	1028.2	989.4	952.4	925.4	900.1	876.5	859.7	846.2	844.5
5°	1107.4	1063.6	982.7	906.9	837.7	780.4	731.6	692.8	664.1	643.9	642.2
7.5°	1127.7	1060.2	937.2	824.3	721.4	638.8	568.0	515.8	478.7	463.5	451.7
10°	1144.5	1056.9	891.7	741.7	606.8	502.3	418.0	365.8	338.8	328.7	323.6
12.5°	1173.2	1060.2	852.9	665.8	507.4	384.3	320.3	291.6	279.8	271.4	269.7
15°	1215.3	1075.4	815.8	591.6	406.2	310.2	273.1	254.5	242.7	241.0	239.4
17.5°	1257.5	1088.9	782.1	515.8	337.1	269.7	244.4	229.2	220.8	219.1	219.1
20°	1306.3	1105.8	745.0	443.3	288.2	242.7	222.5	210.7	200.6	198.9	198.9
22.5°	1363.7	1129.4	709.6	379.3	256.2	222.5	205.6	192.2	183.7	182.0	182.0
25°	1441.2	1164.8	681.0	332.1	234.3	205.6	190.5	178.7	171.9	168.6	168.6
27.5°	1527.2	1213.6	660.8	303.4	219.1	192.2	177.0	166.9	160.1	156.8	156.8
30°	1623.2	1267.6	647.3	291.6	210.7	180.4	166.9	156.8	148.3	146.6	146.6
32.5°	1729.4	1329.9	638.8	293.3	209.0	171.9	156.8	146.6	139.9	136.5	136.5
35°	1847.4	1399.0	633.8	303.4	212.4	165.2	148.3	138.2	131.5	128.1	128.1
37.5°	1978.9	1480.0	633.8	313.5	220.8	163.5	139.9	129.8	124.7	121.4	121.4
40°	2101.9	1565.9	640.5	325.3	229.2	163.5	133.2	124.7	118.0	114.6	114.6
42.5°	2198.0	1614.8	645.6	337.1	234.3	161.8	126.4	118.0	112.9	109.6	109.6
45°	2307.6	1667.1	635.5	342.2	234.3	158.4	121.4	112.9	107.9	104.5	104.5
47.5°	2429.0	1731.1	633.8	345.5	229.2	151.7	116.3	107.9	104.5	101.1	101.1
50°	2552.0	1801.9	637.2	343.9	222.5	141.6	109.6	104.5	99.5	96.1	96.1
52.5°	2691.9	1876.1	643.9	340.5	207.3	129.8	104.5	99.5	94.4	91.0	89.3
55°	2847.0	1957.0	657.4	333.7	187.1	118.0	99.5	94.4	87.7	84.3	82.6
57.5°	3025.7	2056.4	672.6	320.3	165.2	107.9	94.4	87.7	77.5	72.5	70.8
60°	3195.9	2169.4	689.4	288.2	143.3	97.8	89.3	79.2	69.1	65.7	64.1
62.5°	3356.0	2280.6	697.8	230.9	121.4	89.3	84.3	72.5	62.4	59.0	57.3
65°	3458.9	2402.0	679.3	156.8	99.5	82.6	77.5	67.4	57.3	52.3	52.3
67.5°	3465.6	2459.3	615.2	102.8	80.9	74.2	70.8	60.7	50.6	47.2	45.5
70°	3295.3	2373.3	470.3	80.9	67.4	64.1	64.1	53.9	43.8	40.5	38.8
72.5°	2904.3	2101.9	300.0	65.7	57.3	53.9	53.9	45.5	38.8	33.7	32.0
75°	2292.4	1621.5	160.1	53.9	47.2	45.5	42.1	37.1	32.0	28.7	27.0
77.5°	1053.5	714.7	74.2	38.8	35.4	35.4	32.0	27.0	25.3	21.9	21.9
80°	416.3	242.7	37.1	25.3	23.6	23.6	23.6	18.5	18.5	15.2	13.5
82.5°	114.6	50.6	18.5	15.2	15.2	15.2	13.5	11.8	11.8	10.1	10.1
85°	11.8	8.4	8.4	8.4	8.4	6.7	6.7	5.1	3.4	3.4	3.4
87.5°	5.1	5.1	5.1	5.1	5.1	3.4	1.7	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)