

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: P842378

Luminaire Tested: **ARCH4-40-727-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842378
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: ARCH4-40-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 355mA 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: 5125 lumens
Efficiency: N/A
Efficacy: 117.0 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): 43.8
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

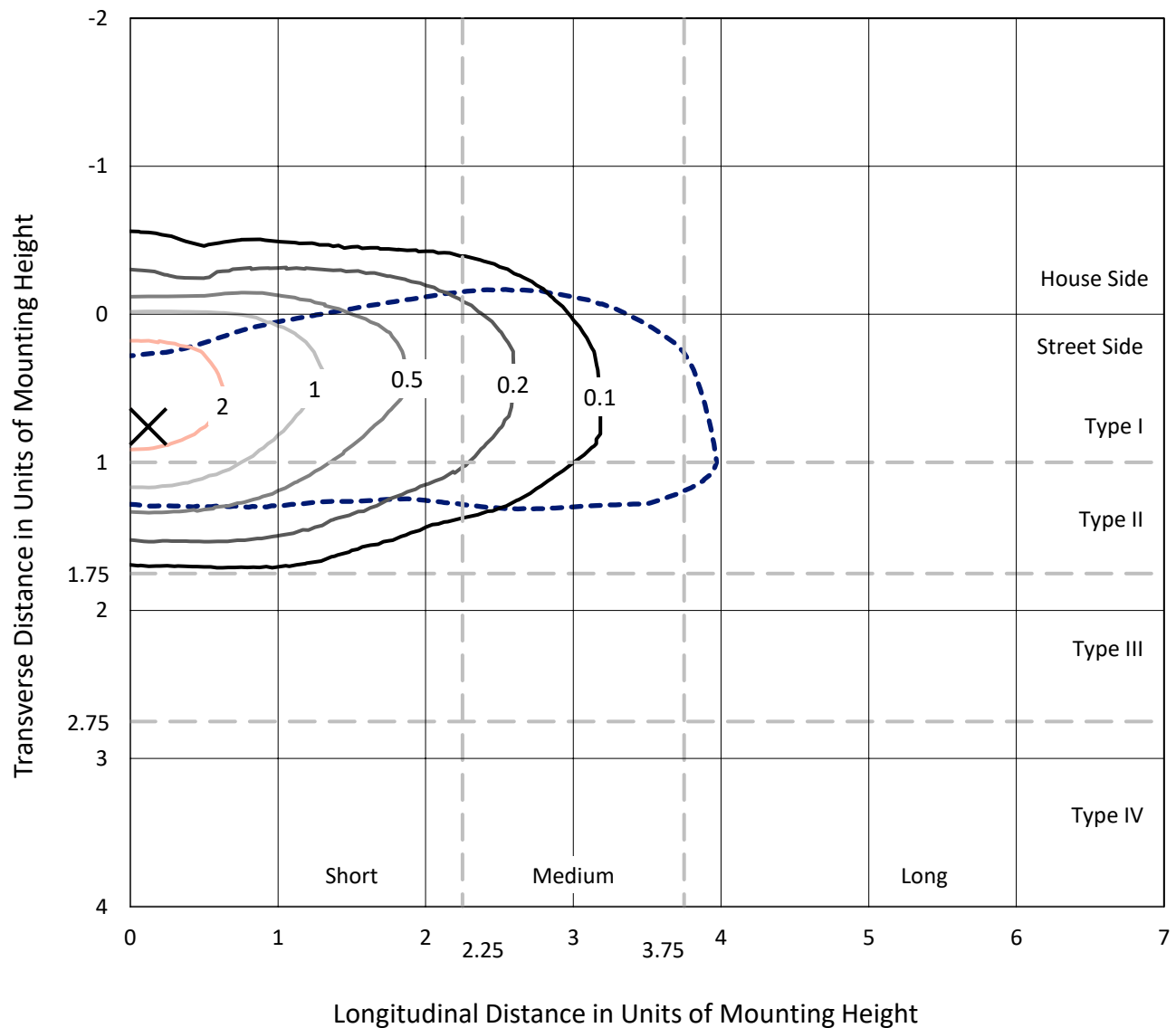


REPORT NUMBER: P842378

CATALOG NUMBER: ARCH4-40-727-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

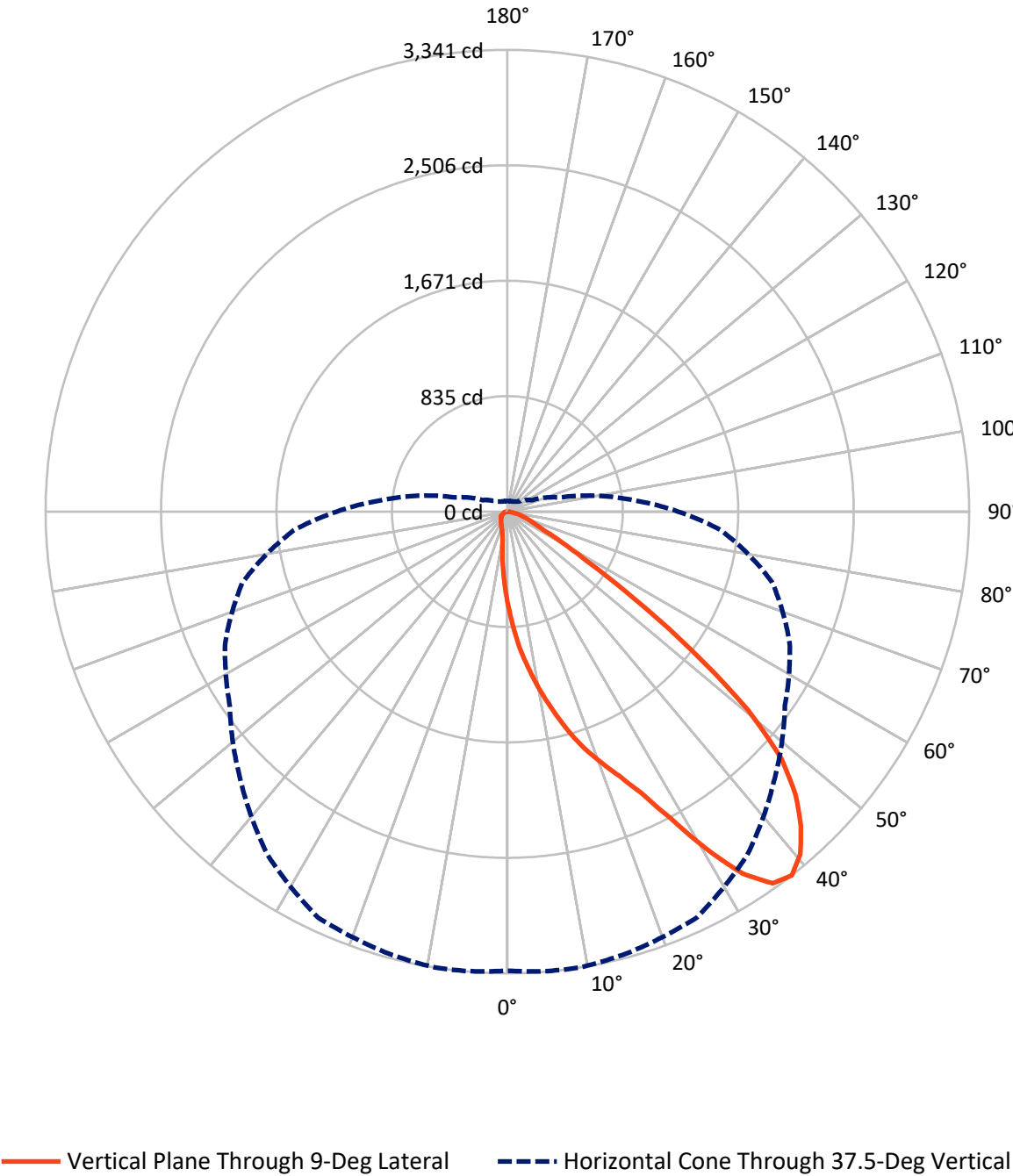
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 fc
Type II - Short - N/A

REPORT NUMBER: P842378
CATALOG NUMBER: ARCH4-40-727-U-T2R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P842378

CATALOG NUMBER: ARCH4-40-727-U-T2R-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	623.3	0.0	623.3
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	4501.7	0.0	4501.7
	% Fixture	87.8	0.0	87.8
Total	Lumens	5125.0	0.0	5125.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.1	1.3
10°-20°	236.7	4.6
20°-30°	486.3	9.5
30°-40°	859.6	16.8
40°-50°	1141.9	22.3
50°-60°	1083.0	21.1
60°-70°	826.3	16.1
70°-80°	400.6	7.8
80°-90°	22.6	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°	5125.0	100.0
0°-180°	5125.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842378

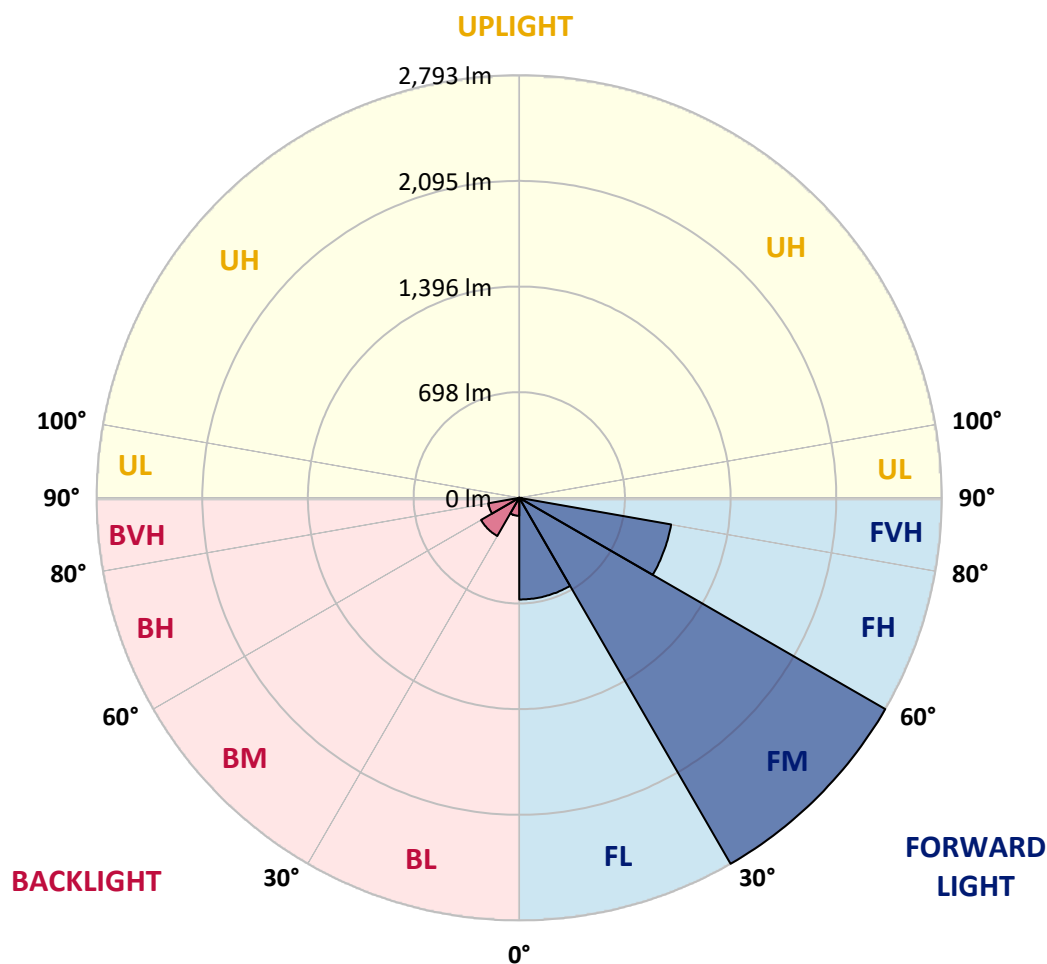
CATALOG NUMBER: ARCH4-40-727-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	672.1	13.1			
FM	(30°-60°)	2792.9	54.5			
FH	(60°-80°)	1018.8	19.9			G1/1800
FVH	(80°-90°)	17.9	0.3			G1/100
BL	(0°-30°)	118.9	2.3	B1/500		
BM	(30°-60°)	291.7	5.7	B1/1000		
BH	(60°-80°)	208.0	4.1	B1/500		G1/500
BVH	(80°-90°)	4.7	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



REPORT NUMBER: P842378

CATALOG NUMBER: ARCH4-40-727-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	677.5	677.5	677.5	677.5	677.5	677.5	677.5	677.5	677.5	677.5	677.5
2.5°	839.5	824.7	841.6	839.5	824.7	815.3	785.8	776.3	741.6	716.4	694.3
5°	1012.0	997.3	1012.0	1007.8	986.7	963.6	915.2	883.6	821.6	766.9	717.4
7.5°	1155.1	1155.1	1161.4	1162.4	1137.2	1101.4	1041.4	994.1	906.8	822.6	743.7
10°	1309.7	1310.7	1324.4	1315.0	1281.3	1232.9	1157.2	1097.2	992.0	881.5	769.0
12.5°	1474.8	1475.9	1480.1	1475.9	1435.9	1373.9	1282.3	1203.4	1082.5	948.9	803.7
15°	1640.0	1641.1	1646.3	1639.0	1594.8	1522.2	1418.0	1321.3	1178.2	1024.6	845.8
17.5°	1794.6	1796.7	1801.0	1791.5	1745.2	1658.9	1552.7	1435.9	1280.2	1105.6	893.1
20°	1933.5	1935.6	1938.8	1926.1	1879.9	1793.6	1678.9	1556.9	1384.4	1188.7	944.7
22.5°	2073.4	2075.5	2080.8	2063.9	2012.4	1913.5	1801.0	1674.7	1494.8	1280.2	1004.6
25°	2252.2	2254.4	2258.6	2234.4	2163.9	2048.2	1929.3	1799.9	1614.8	1383.3	1078.3
27.5°	2514.2	2512.1	2512.1	2467.9	2346.9	2196.5	2058.7	1927.2	1744.2	1493.8	1159.3
30°	2838.2	2832.9	2829.8	2769.8	2597.3	2363.8	2191.2	2046.1	1868.3	1610.6	1246.6
32.5°	3128.5	3128.5	3122.2	3059.1	2876.1	2588.9	2332.2	2161.8	1988.2	1728.4	1337.0
35°	3300.0	3307.4	3304.2	3256.9	3123.3	2830.8	2522.6	2300.6	2114.4	1851.5	1445.4
37.5°	3323.1	3337.9	3341.0	3312.6	3242.1	3028.6	2734.0	2451.1	2253.3	1984.0	1550.6
40°	3229.5	3261.1	3261.1	3256.9	3231.6	3122.2	2911.8	2625.7	2396.4	2121.8	1656.8
42.5°	3085.4	3118.0	3113.8	3129.6	3123.3	3100.1	3011.8	2788.7	2539.4	2263.8	1753.6
45°	2897.1	2930.8	2922.3	2950.8	2963.4	2988.6	3001.2	2902.4	2680.4	2418.5	1862.0
47.5°	2595.2	2652.0	2664.6	2715.1	2767.7	2846.6	2906.6	2943.4	2811.9	2584.7	1979.8
50°	2149.2	2229.1	2254.4	2360.6	2504.7	2667.8	2764.6	2892.9	2904.5	2755.1	2107.1
52.5°	1539.0	1631.6	1670.5	1845.1	2141.8	2425.8	2600.4	2781.4	2940.2	2918.1	2244.9
55°	995.2	1074.1	1111.9	1276.0	1670.5	2116.5	2406.9	2637.3	2920.2	3067.5	2402.7
57.5°	613.3	658.5	683.8	824.7	1187.7	1720.0	2153.4	2504.7	2859.2	3196.9	2566.8
60°	413.4	439.7	452.3	518.6	806.9	1285.5	1805.2	2365.9	2779.3	3284.2	2716.2
62.5°	274.6	283.0	295.6	336.6	532.3	902.6	1386.5	2117.6	2719.3	3289.5	2826.6
65°	212.5	216.7	222.0	239.8	328.2	631.2	975.2	1715.7	2629.9	3178.0	2861.3
67.5°	167.3	171.5	177.8	187.2	237.7	428.1	663.8	1257.1	2446.9	3003.3	2804.5
70°	131.5	134.7	138.9	147.3	185.1	310.3	438.7	835.3	2077.6	2837.1	2625.7
72.5°	104.1	107.3	111.5	119.9	150.4	227.2	300.9	520.7	1602.1	2634.1	2281.7
75°	82.1	84.2	87.3	95.7	121.0	176.7	204.1	311.4	1088.8	2262.8	1777.8
77.5°	41.0	50.5	57.9	66.3	88.4	122.0	135.7	172.5	459.7	1161.4	847.9
80°	24.2	29.5	31.6	36.8	57.9	73.6	73.6	69.4	145.2	446.0	346.1
82.5°	13.7	18.9	20.0	21.0	34.7	42.1	33.7	25.2	29.5	149.4	101.0
85°	4.2	6.3	7.4	8.4	11.6	12.6	11.6	10.5	8.4	14.7	9.5
87.5°	0.0	0.0	0.0	0.0	1.1	2.1	2.1	2.1	3.2	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P842378

CATALOG NUMBER: ARCH4-40-727-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	677.5	677.5	677.5	677.5	677.5	677.5	677.5	677.5	677.5	677.5	677.5
2.5°	681.7	668.0	641.7	617.5	594.4	577.5	561.7	547.0	536.5	528.1	527.0
5°	691.1	663.8	613.3	566.0	522.8	487.1	456.6	432.4	414.5	401.8	400.8
7.5°	703.8	661.7	584.9	514.4	450.2	398.7	354.5	321.9	298.8	289.3	281.9
10°	714.3	659.6	556.5	462.9	378.7	313.5	260.9	228.3	211.4	205.1	202.0
12.5°	732.2	661.7	532.3	415.5	316.6	239.8	199.9	182.0	174.6	169.4	168.3
15°	758.5	671.2	509.1	369.2	253.5	193.6	170.4	158.8	151.5	150.4	149.4
17.5°	784.8	679.6	488.1	321.9	210.4	168.3	152.5	143.1	137.8	136.8	136.8
20°	815.3	690.1	465.0	276.7	179.9	151.5	138.9	131.5	125.2	124.1	124.1
22.5°	851.0	704.8	442.9	236.7	159.9	138.9	128.3	119.9	114.7	113.6	113.6
25°	899.4	726.9	425.0	207.2	146.2	128.3	118.9	111.5	107.3	105.2	105.2
27.5°	953.1	757.4	412.4	189.4	136.8	119.9	110.5	104.1	99.9	97.8	97.8
30°	1013.0	791.1	404.0	182.0	131.5	112.6	104.1	97.8	92.6	91.5	91.5
32.5°	1079.3	830.0	398.7	183.0	130.4	107.3	97.8	91.5	87.3	85.2	85.2
35°	1152.9	873.1	395.5	189.4	132.5	103.1	92.6	86.3	82.1	79.9	79.9
37.5°	1235.0	923.6	395.5	195.7	137.8	102.0	87.3	81.0	77.8	75.7	75.7
40°	1311.8	977.3	399.7	203.0	143.1	102.0	83.1	77.8	73.6	71.5	71.5
42.5°	1371.8	1007.8	402.9	210.4	146.2	101.0	78.9	73.6	70.5	68.4	68.4
45°	1440.1	1040.4	396.6	213.5	146.2	98.9	75.7	70.5	67.3	65.2	65.2
47.5°	1515.9	1080.4	395.5	215.7	143.1	94.7	72.6	67.3	65.2	63.1	63.1
50°	1592.7	1124.5	397.6	214.6	138.9	88.4	68.4	65.2	62.1	60.0	60.0
52.5°	1680.0	1170.8	401.8	212.5	129.4	81.0	65.2	62.1	58.9	56.8	55.8
55°	1776.8	1221.3	410.3	208.3	116.8	73.6	62.1	58.9	54.7	52.6	51.5
57.5°	1888.3	1283.4	419.7	199.9	103.1	67.3	58.9	54.7	48.4	45.2	44.2
60°	1994.5	1353.9	430.3	179.9	89.4	61.0	55.8	49.4	43.1	41.0	40.0
62.5°	2094.5	1423.3	435.5	144.1	75.7	55.8	52.6	45.2	38.9	36.8	35.8
65°	2158.6	1499.0	423.9	97.8	62.1	51.5	48.4	42.1	35.8	32.6	32.6
67.5°	2162.8	1534.8	384.0	64.2	50.5	46.3	44.2	37.9	31.6	29.5	28.4
70°	2056.6	1481.2	293.5	50.5	42.1	40.0	40.0	33.7	27.4	25.2	24.2
72.5°	1812.5	1311.8	187.2	41.0	35.8	33.7	33.7	28.4	24.2	21.0	20.0
75°	1430.7	1012.0	99.9	33.7	29.5	28.4	26.3	23.1	20.0	17.9	16.8
77.5°	657.5	446.0	46.3	24.2	22.1	22.1	20.0	16.8	15.8	13.7	13.7
80°	259.8	151.5	23.1	15.8	14.7	14.7	14.7	11.6	11.6	9.5	8.4
82.5°	71.5	31.6	11.6	9.5	9.5	9.5	8.4	7.4	7.4	6.3	6.3
85°	7.4	5.3	5.3	5.3	5.3	4.2	4.2	3.2	2.1	2.1	2.1
87.5°	3.2	3.2	3.2	3.2	3.2	2.1	1.1	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)