

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: P800310

Luminaire Tested: **ARCH2-90-740-U-T3-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P800310
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-90-740-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 695mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8671 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 93.7
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

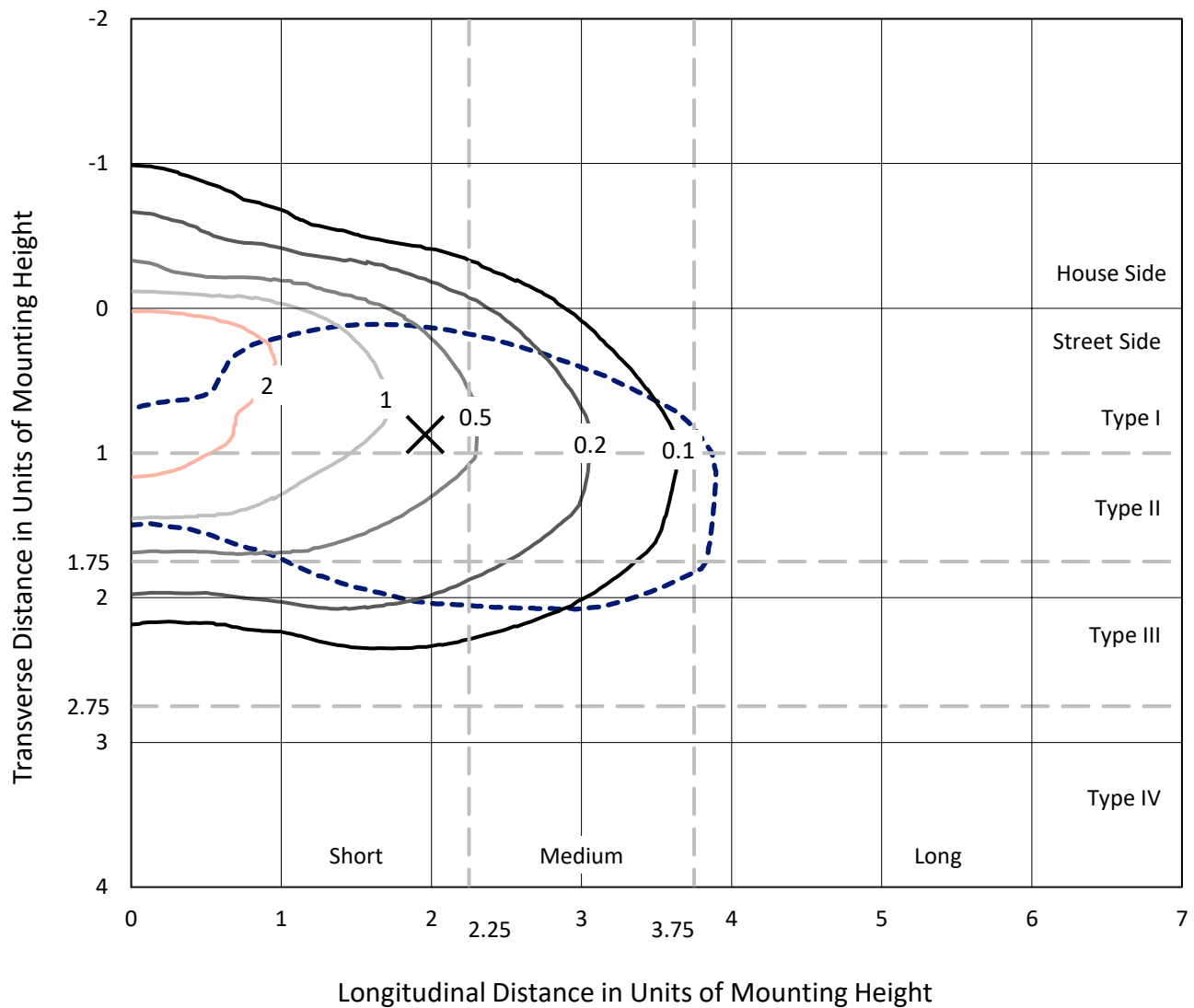


REPORT NUMBER: P800310

CATALOG NUMBER: ARCH2-90-740-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd

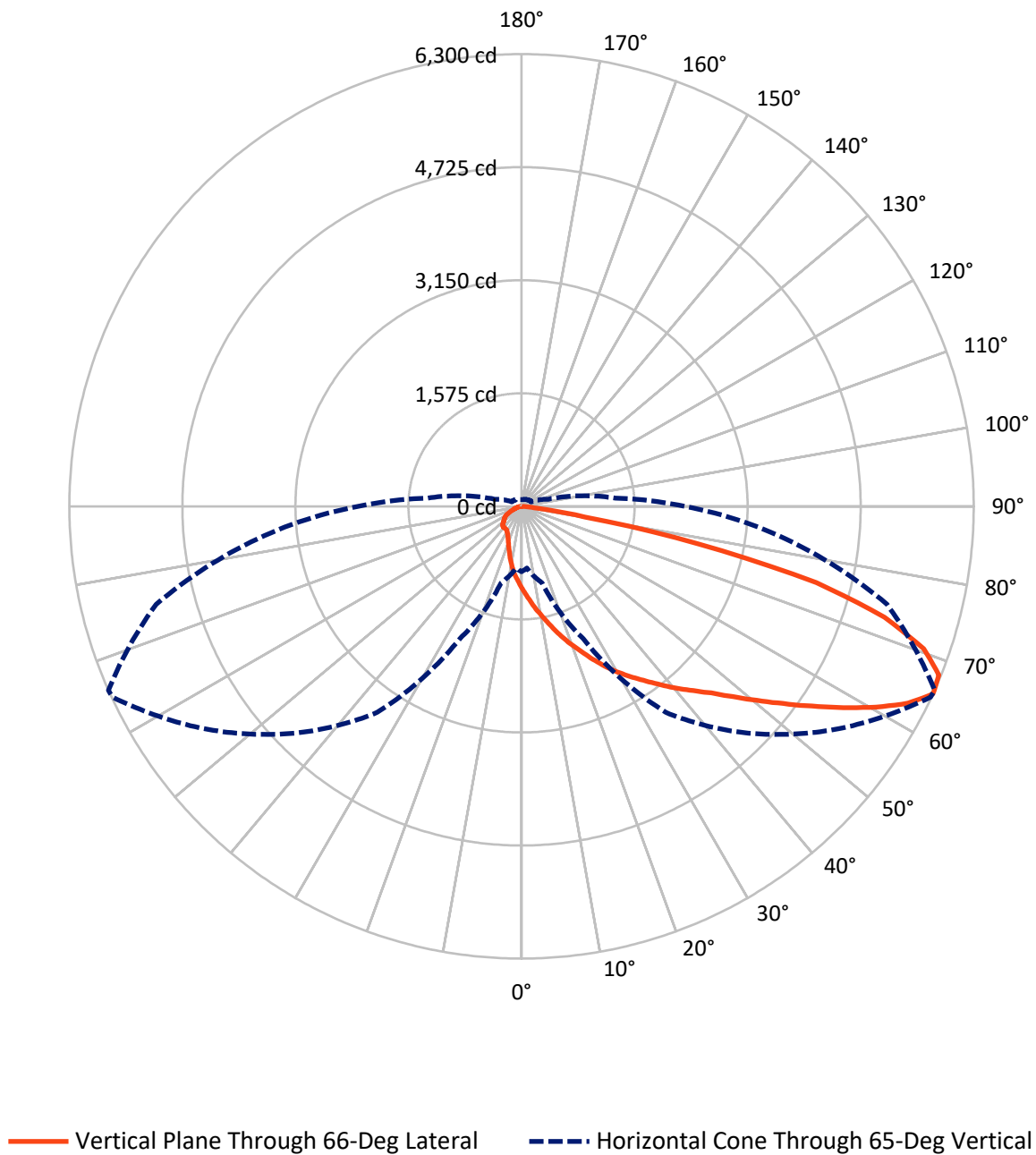


Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
Type III - Short - N/A

REPORT NUMBER: P800310

CATALOG NUMBER: ARCH2-90-740-U-T3-HSS

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	917.2	0.0	917.2
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	7753.8	0.0	7753.8
	% Fixture	89.4	0.0	89.4
Total	Lumens	8671.0	0.0	8671.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.3	1.3
10°-20°	369.2	4.3
20°-30°	667.9	7.7
30°-40°	1044.5	12.0
40°-50°	1584.4	18.3
50°-60°	2013.1	23.2
60°-70°	1881.0	21.7
70°-80°	934.8	10.8
80°-90°	62.8	0.7
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°	8671.0	100.0
0°-180°	8671.0	100.0

Coefficient of Utilization



REPORT NUMBER: P800310

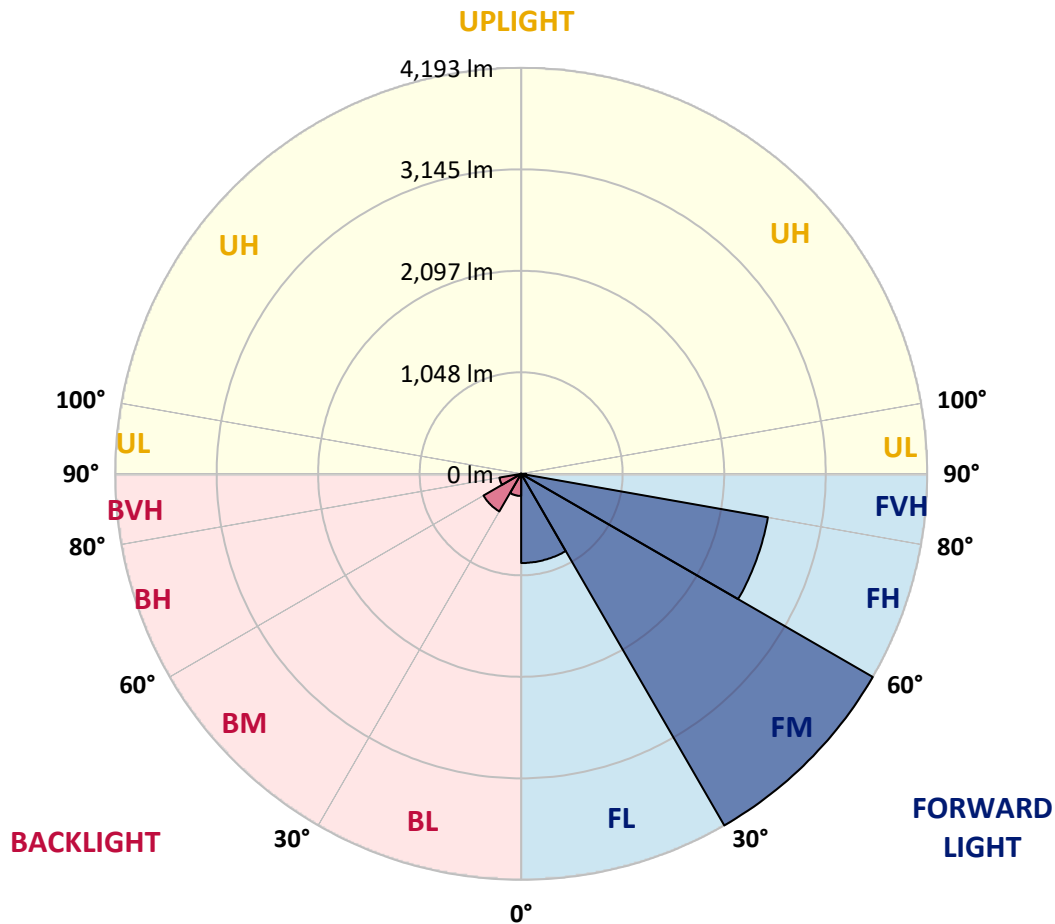
CATALOG NUMBER: ARCH2-90-740-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	921.3	10.6			
FM	(30°-60°)	4193.4	48.4			
FH	(60°-80°)	2587.5	29.8			G2/5000
FVH	(80°-90°)	51.7	0.6			G1/100
BL	(0°-30°)	229.1	2.6	B1/500		
BM	(30°-60°)	448.6	5.2	B1/1000		
BH	(60°-80°)	228.4	2.6	B1/500		G1/500
BVH	(80°-90°)	11.1	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 III Short



REPORT NUMBER: P800310

CATALOG NUMBER: ARCH2-90-740-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1147.6	1147.6	1147.6	1147.6	1147.6	1147.6	1147.6	1147.6	1147.6	1147.6	1147.6
2.5°	1340.3	1351.2	1356.7	1358.5	1316.7	1298.5	1280.3	1238.5	1229.4	1205.8	1174.8
5°	1576.8	1591.3	1587.7	1580.4	1529.5	1471.3	1424.0	1345.8	1333.1	1276.7	1207.6
7.5°	1809.5	1822.3	1818.6	1791.4	1735.0	1653.1	1574.9	1460.4	1442.2	1351.2	1240.3
10°	2004.1	2015.0	2013.2	1986.0	1918.7	1818.6	1724.1	1571.3	1549.5	1420.4	1267.6
12.5°	2164.2	2178.7	2176.9	2158.7	2098.7	1989.6	1882.3	1698.6	1671.3	1504.0	1305.8
15°	2289.7	2307.8	2307.8	2300.6	2258.7	2167.8	2046.0	1838.6	1805.9	1600.4	1353.1
17.5°	2366.0	2380.6	2393.3	2406.1	2377.0	2307.8	2196.9	1978.7	1944.1	1695.0	1402.2
20°	2406.1	2420.6	2429.7	2457.0	2462.4	2427.9	2340.6	2116.9	2080.5	1802.3	1458.5
22.5°	2471.5	2484.3	2486.1	2509.7	2520.6	2529.7	2475.2	2253.3	2224.2	1920.5	1522.2
25°	2580.6	2595.2	2589.7	2600.6	2602.5	2613.4	2607.9	2409.7	2380.6	2055.1	1598.6
27.5°	2720.7	2738.9	2735.2	2724.3	2707.9	2698.9	2722.5	2567.9	2540.6	2189.6	1676.8
30°	2871.6	2893.4	2888.0	2866.2	2822.5	2784.3	2817.1	2717.0	2691.6	2327.9	1764.1
32.5°	3024.4	3049.9	3048.0	3011.7	2937.1	2871.6	2920.7	2857.1	2838.9	2477.0	1858.6
35°	3124.4	3157.2	3153.5	3131.7	3035.3	2978.9	3038.9	3000.7	2988.0	2658.8	1995.0
37.5°	3286.3	3320.8	3289.9	3235.4	3124.4	3095.3	3168.1	3162.6	3153.5	2851.6	2138.7
40°	3679.1	3730.0	3648.2	3424.5	3242.6	3217.2	3320.8	3342.7	3333.6	3042.6	2267.8
42.5°	4090.1	4166.5	4039.2	3730.0	3457.2	3364.5	3488.1	3519.1	3508.1	3206.3	2384.2
45°	4339.3	4372.0	4244.7	4004.6	3837.3	3542.7	3666.4	3717.3	3708.2	3402.7	2533.4
47.5°	4543.0	4530.2	4384.7	4222.9	4253.8	3793.7	3868.2	3968.3	3961.0	3619.1	2697.0
50°	4586.6	4557.5	4499.3	4397.5	4479.3	4048.3	4081.0	4253.8	4246.5	3859.1	2862.5
52.5°	4279.3	4241.1	4399.3	4484.8	4457.5	4233.8	4315.6	4566.6	4563.0	4119.2	3020.8
55°	3511.8	3480.9	3906.4	4348.4	4433.8	4364.7	4575.7	4892.1	4912.1	4395.6	3164.4
57.5°	2762.5	2729.8	3148.1	4006.5	4346.5	4484.8	4879.4	5265.0	5290.4	4695.7	3300.8
60°	2202.4	2153.3	2473.3	3468.1	4182.9	4577.5	5172.2	5674.1	5677.8	4970.3	3384.5
62.5°	1496.7	1442.2	1796.8	2786.2	3908.2	4592.1	5397.7	6027.0	6041.5	5175.8	3399.0
65°	909.3	863.9	1103.9	2035.1	3502.7	4468.4	5401.3	6287.0	6299.8	5270.4	3311.7
67.5°	527.4	509.2	631.1	1267.6	2829.8	4135.6	5174.0	6247.0	6270.7	5230.4	3113.5
70°	307.3	305.5	351.0	627.4	1996.9	3475.4	4666.6	5910.6	5945.1	5021.3	2809.8
72.5°	225.5	229.1	247.3	336.4	1156.7	2502.4	3951.9	5234.0	5286.8	4612.1	2377.0
75°	178.2	180.0	196.4	229.1	607.4	1414.9	2960.7	4201.0	4242.9	3882.8	1856.8
77.5°	132.8	136.4	149.1	161.9	281.9	649.3	1665.9	2587.9	2518.8	2131.4	896.6
80°	96.4	105.5	110.9	116.4	149.1	251.0	500.1	902.0	894.8	931.1	423.7
82.5°	61.8	69.1	74.6	78.2	89.1	120.0	149.1	201.9	218.2	361.9	169.1
85°	27.3	30.9	34.6	41.8	38.2	41.8	61.8	40.0	34.6	54.6	30.9
87.5°	0.0	0.0	5.5	9.1	7.3	3.6	10.9	7.3	5.5	5.5	5.5
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: P800310

CATALOG NUMBER: ARCH2-90-740-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1147.6	1147.6	1147.6	1147.6	1147.6	1147.6	1147.6	1147.6	1147.6	1147.6	1147.6
2.5°	1158.5	1138.5	1096.6	1056.6	1033.0	1002.1	974.8	949.3	947.5	940.2	927.5
5°	1173.0	1134.8	1056.6	982.1	925.7	865.7	814.7	774.7	760.2	749.3	734.7
7.5°	1187.6	1127.6	1011.2	902.0	812.9	729.3	669.3	614.7	598.3	583.8	574.7
10°	1193.0	1114.8	958.4	812.9	696.5	607.4	543.8	503.8	489.2	481.9	476.5
12.5°	1209.4	1107.5	909.3	729.3	594.7	512.9	467.4	443.7	438.3	432.8	427.4
15°	1231.2	1107.5	860.2	647.4	514.7	449.2	421.9	405.6	401.9	400.1	396.5
17.5°	1254.9	1107.5	812.9	578.3	456.5	407.4	387.4	378.3	376.5	374.6	372.8
20°	1287.6	1109.4	762.0	518.3	414.6	376.5	360.1	349.2	347.4	345.5	345.5
22.5°	1320.3	1113.0	712.9	472.8	387.4	352.8	332.8	321.9	318.3	318.3	318.3
25°	1362.2	1123.9	667.4	434.7	363.7	331.0	305.5	296.4	294.6	294.6	292.8
27.5°	1411.3	1136.6	627.4	405.6	340.1	305.5	280.1	271.0	267.3	267.3	265.5
30°	1464.0	1149.4	594.7	383.7	316.4	280.1	256.4	245.5	241.9	243.7	241.9
32.5°	1522.2	1167.6	569.2	369.2	294.6	258.2	236.4	223.7	221.9	221.9	220.1
35°	1620.4	1218.5	565.6	361.9	276.4	241.9	220.1	207.3	205.5	205.5	203.7
37.5°	1725.9	1276.7	582.0	358.3	261.9	227.3	207.3	194.6	192.8	192.8	192.8
40°	1815.0	1320.3	600.1	358.3	252.8	214.6	196.4	185.5	185.5	185.5	185.5
42.5°	1875.0	1324.0	596.5	358.3	245.5	205.5	189.1	178.2	178.2	180.0	178.2
45°	1964.1	1342.2	582.0	352.8	240.1	198.2	181.9	172.8	171.0	172.8	172.8
47.5°	2069.6	1374.9	567.4	331.0	238.2	191.0	176.4	165.5	163.7	165.5	163.7
50°	2169.6	1404.0	560.1	301.9	234.6	183.7	169.1	158.2	156.4	158.2	156.4
52.5°	2253.3	1416.7	547.4	281.9	225.5	176.4	161.9	150.9	147.3	149.1	149.1
55°	2320.6	1413.1	529.2	265.5	209.1	169.1	152.8	143.7	138.2	138.2	136.4
57.5°	2382.4	1414.9	512.9	249.2	191.0	158.2	145.5	134.6	127.3	125.5	123.7
60°	2406.1	1405.8	483.8	227.3	172.8	149.1	136.4	123.7	116.4	114.6	112.8
62.5°	2373.3	1373.1	445.6	189.1	156.4	138.2	127.3	114.6	107.3	105.5	103.7
65°	2280.6	1311.2	387.4	149.1	141.9	125.5	116.4	107.3	98.2	94.6	92.8
67.5°	2122.3	1222.1	314.6	120.0	125.5	114.6	109.1	98.2	87.3	83.7	81.8
70°	1896.8	1103.9	236.4	101.8	110.9	101.8	98.2	87.3	78.2	74.6	72.7
72.5°	1580.4	913.0	165.5	87.3	96.4	89.1	85.5	78.2	69.1	63.7	63.7
75°	1194.8	654.7	109.1	74.6	80.0	76.4	70.9	65.5	60.0	56.4	54.6
77.5°	514.7	254.6	67.3	56.4	65.5	63.7	56.4	52.7	50.9	47.3	47.3
80°	221.9	103.7	41.8	41.8	47.3	45.5	43.6	40.0	40.0	38.2	36.4
82.5°	81.8	41.8	25.5	30.9	34.6	30.9	30.9	30.9	30.9	29.1	29.1
85°	20.0	12.7	12.7	18.2	20.0	18.2	20.0	18.2	18.2	18.2	16.4
87.5°	5.5	5.5	7.3	7.3	7.3	7.3	7.3	5.5	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)