

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: P842452

Luminaire Tested: **ARCH4-50-727-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842452
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-50-727-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 435mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6303 lumens
Efficiency: N/A
Efficacy: 118.5 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): 53.2
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



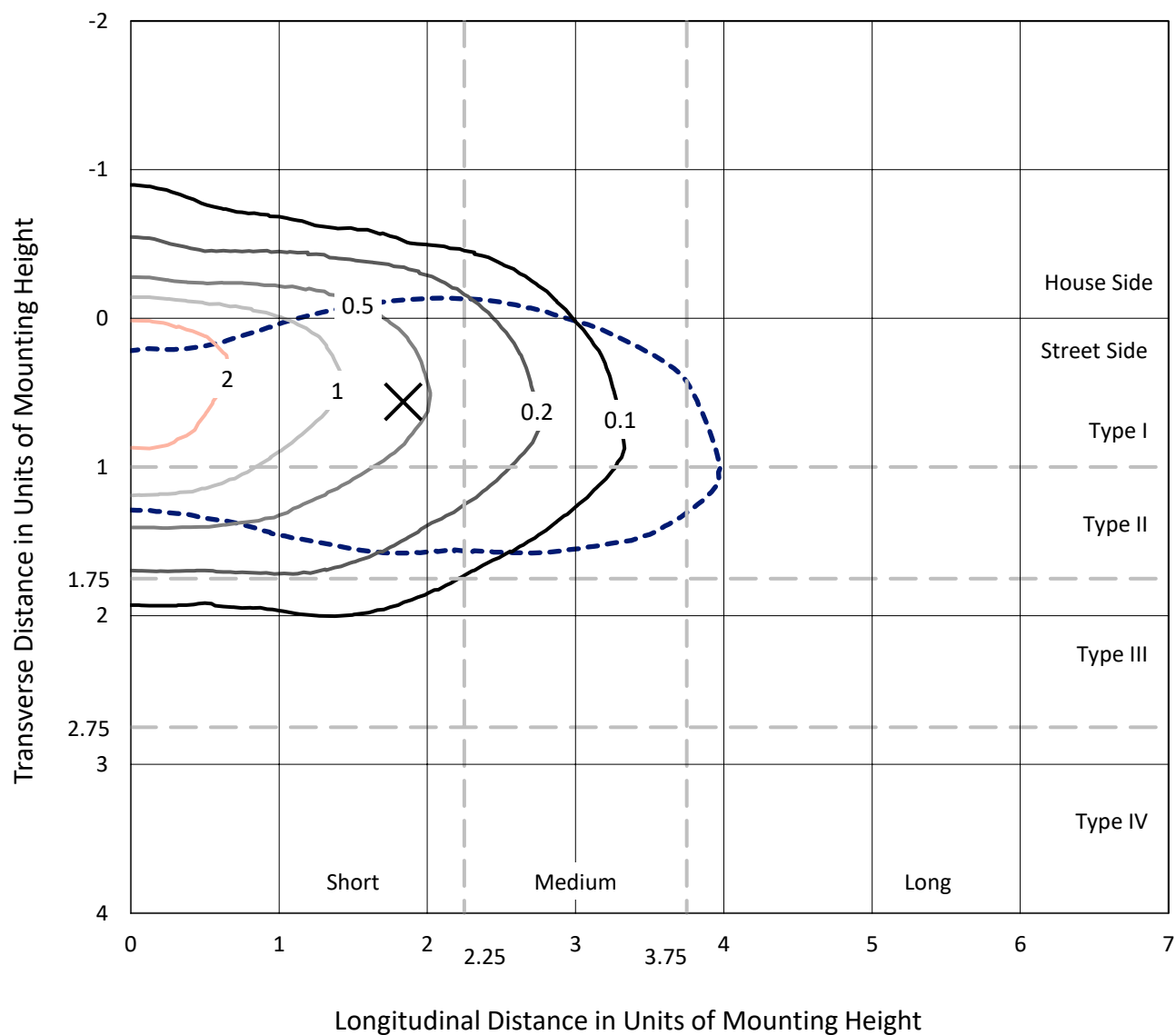
REPORT NUMBER: P842452

CATALOG NUMBER: ARCH4-50-727-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

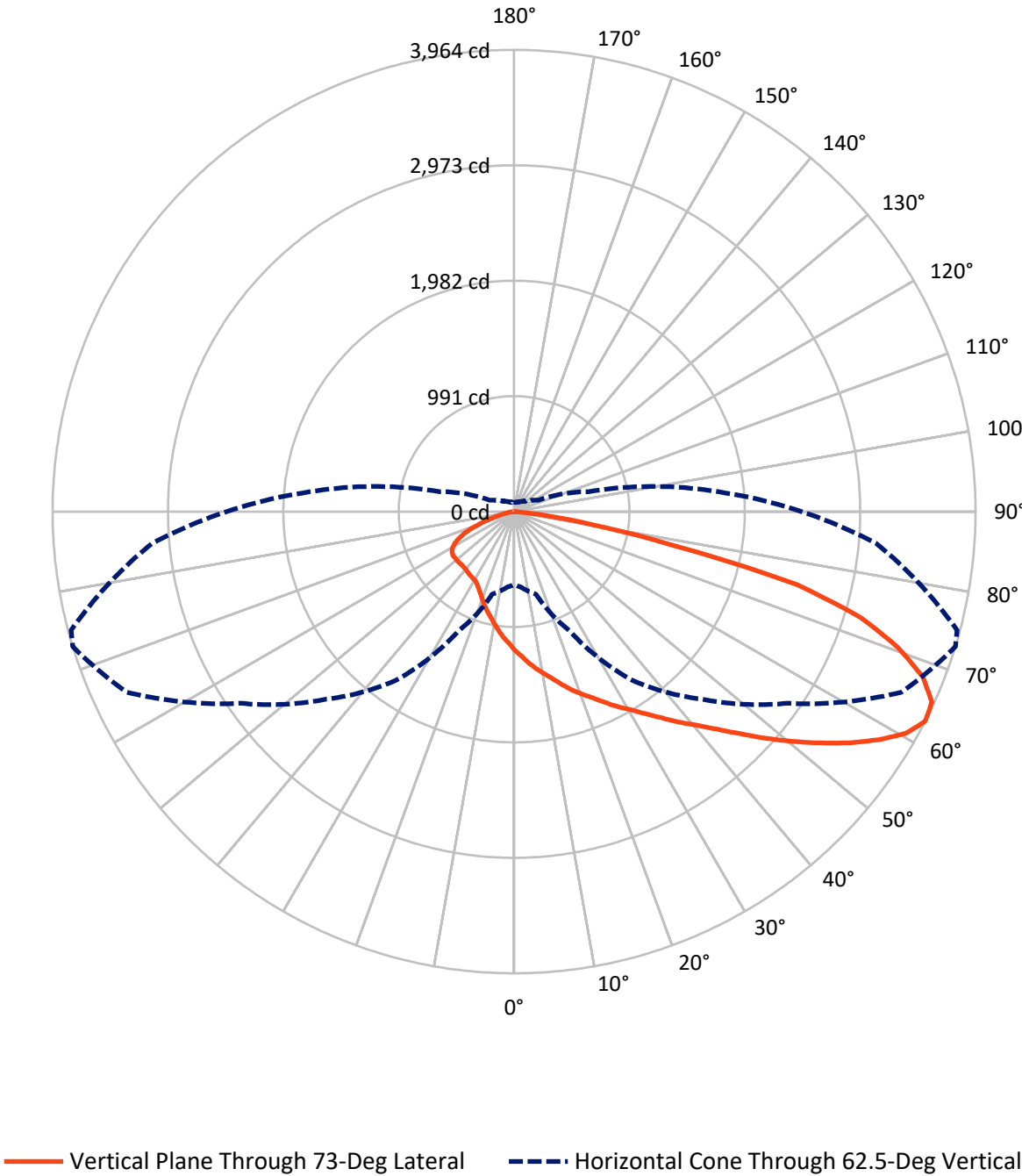


Based on 25 foot mounting height. Maximum calculated value = 3 fc

Type II - Short - N/A

REPORT NUMBER: P842452
CATALOG NUMBER: ARCH4-50-727-U-T2U-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P842452

CATALOG NUMBER: ARCH4-50-727-U-T2U-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	977.1	0.0	977.1
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	5325.9	0.0	5325.9
	% Fixture	84.5	0.0	84.5
Total	Lumens	6303.0	0.0	6303.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	1.8
10°-20°	347.9	5.5
20°-30°	579.1	9.2
30°-40°	873.8	13.9
40°-50°	1221.3	19.4
50°-60°	1349.1	21.4
60°-70°	1175.2	18.6
70°-80°	593.6	9.4
80°-90°	47.7	0.8
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°	6303.0	100.0
0°-180°	6303.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842452

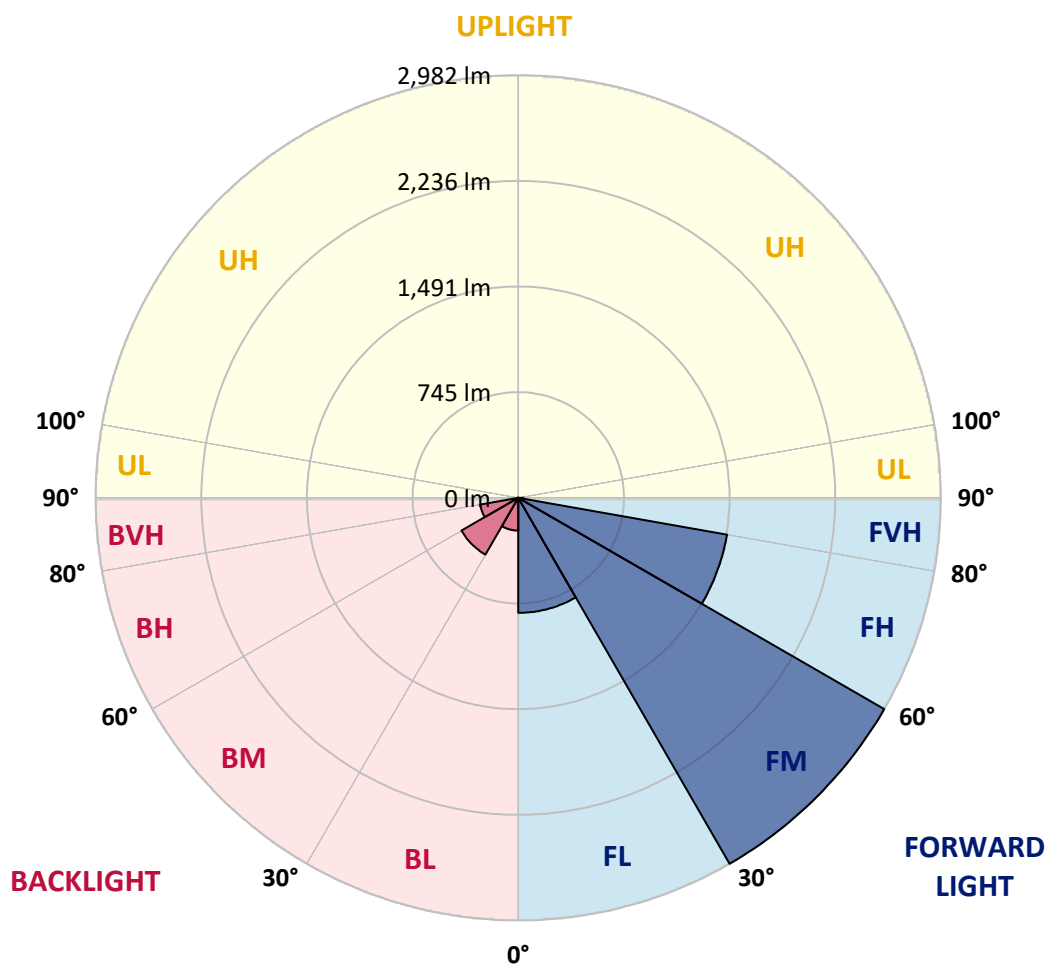
CATALOG NUMBER: ARCH4-50-727-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	811.4	12.9			
FM	(30°-60°)	2981.5	47.3			
FH	(60°-80°)	1496.1	23.7			G1/1800
FVH	(80°-90°)	36.9	0.6			G1/100
BL	(0°-30°)	230.9	3.7	B1/500		
BM	(30°-60°)	462.6	7.3	B1/1000		
BH	(60°-80°)	272.7	4.3	B1/500		G1/500
BVH	(80°-90°)	10.8	0.2			G1/100
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: P842452

CATALOG NUMBER: ARCH4-50-727-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	1193.5	1193.5	1193.5	1193.5	1193.5	1193.5	1193.5	1193.5	1193.5	1193.5	1193.5
2.5°	1358.3	1373.4	1365.2	1370.7	1343.2	1325.3	1304.7	1264.9	1242.9	1240.2	1214.1
5°	1557.4	1573.9	1560.2	1556.1	1508.0	1466.8	1420.1	1350.1	1303.4	1295.1	1237.4
7.5°	1756.6	1771.7	1755.2	1742.8	1678.3	1605.5	1536.8	1433.8	1361.0	1347.3	1256.7
10°	1896.7	1910.4	1898.0	1885.7	1818.4	1744.2	1646.7	1512.1	1413.2	1391.3	1269.0
12.5°	2002.4	2010.7	2005.2	1994.2	1931.0	1851.3	1758.0	1600.0	1472.3	1444.8	1288.3
15°	2088.9	2102.7	2095.8	2087.6	2027.1	1947.5	1858.2	1692.0	1541.0	1506.6	1317.1
17.5°	2146.6	2156.2	2157.6	2157.6	2104.1	2025.8	1939.2	1775.8	1609.6	1565.7	1344.6
20°	2172.7	2183.7	2190.6	2201.6	2157.6	2090.3	2002.4	1847.2	1674.2	1624.7	1370.7
22.5°	2185.1	2194.7	2212.6	2237.3	2201.6	2145.3	2064.2	1913.1	1738.7	1686.5	1400.9
25°	2194.7	2207.1	2233.2	2279.8	2255.1	2207.1	2137.0	1988.7	1815.6	1762.1	1444.8
27.5°	2220.8	2235.9	2260.6	2316.9	2286.7	2263.4	2213.9	2069.7	1896.7	1841.7	1498.4
30°	2311.4	2323.8	2322.4	2358.1	2321.0	2314.2	2279.8	2148.0	1975.0	1920.0	1561.6
32.5°	2476.2	2488.6	2458.4	2444.7	2363.6	2365.0	2351.3	2231.8	2068.3	2012.0	1634.3
35°	2653.4	2667.1	2627.3	2604.0	2468.0	2428.2	2435.0	2336.2	2172.7	2116.4	1725.0
37.5°	2811.4	2827.8	2793.5	2759.2	2621.8	2529.8	2528.4	2452.9	2292.2	2234.5	1825.3
40°	2897.9	2917.1	2937.7	2918.5	2774.3	2672.6	2628.7	2572.4	2410.3	2351.3	1933.8
42.5°	2939.1	2992.6	3029.7	3017.4	2899.3	2796.2	2744.1	2697.4	2554.5	2496.8	2062.8
45°	2823.7	2825.1	2903.4	2970.7	2948.7	2880.0	2870.4	2837.4	2719.3	2664.4	2208.4
47.5°	2679.5	2668.5	2723.5	2842.9	2904.7	2922.6	2978.9	2992.6	2907.5	2852.6	2356.8
50°	2333.4	2340.3	2518.8	2690.5	2811.4	2926.7	3055.8	3152.0	3101.1	3049.0	2513.3
52.5°	1898.0	1914.5	2119.2	2496.8	2687.7	2885.5	3101.1	3311.3	3298.9	3249.5	2669.9
55°	1521.7	1547.8	1764.8	2174.1	2529.8	2793.5	3120.4	3456.9	3503.5	3458.2	2823.7
57.5°	1163.3	1190.7	1373.4	1793.7	2327.9	2643.8	3106.6	3584.6	3694.5	3665.6	2965.2
60°	876.2	903.7	1020.4	1454.4	2075.2	2476.2	3038.0	3668.4	3866.1	3835.9	3068.2
62.5°	627.6	649.6	736.1	1131.7	1767.6	2277.1	2869.0	3669.7	3963.6	3938.9	3117.6
65°	451.8	451.8	521.9	807.6	1479.2	2038.1	2613.6	3500.8	3943.0	3936.2	3083.3
67.5°	325.5	328.2	384.6	564.5	1179.8	1748.3	2282.6	3200.0	3783.7	3818.1	2959.7
70°	230.7	237.6	263.7	394.2	891.3	1380.3	1928.3	2805.9	3496.7	3557.1	2720.7
72.5°	178.5	182.7	200.5	274.7	651.0	1025.9	1536.8	2366.4	3113.5	3182.2	2395.2
75°	137.3	141.5	155.2	201.9	467.0	719.7	1091.9	1836.2	2510.6	2632.8	1924.1
77.5°	100.3	105.8	115.4	147.0	271.9	457.3	662.0	1032.8	1385.8	1443.4	1008.1
80°	46.7	53.6	67.3	94.8	147.0	215.6	234.9	398.3	666.1	696.3	546.6
82.5°	26.1	33.0	38.5	57.7	74.2	76.9	79.7	100.3	251.3	277.4	229.4
85°	12.4	16.5	17.9	24.7	24.7	22.0	26.1	19.2	41.2	49.4	48.1
87.5°	0.0	1.4	2.7	6.9	5.5	4.1	4.1	4.1	4.1	5.5	4.1
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: P842452

CATALOG NUMBER: ARCH4-50-727-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1193.5	1193.5	1193.5	1193.5	1193.5	1193.5	1193.5	1193.5	1193.5	1193.5	1193.5
2.5°	1201.7	1183.9	1142.7	1107.0	1083.6	1063.0	1035.5	1023.2	1001.2	1005.3	993.0
5°	1208.6	1175.6	1102.8	1035.5	986.1	942.2	894.1	866.6	836.4	833.7	824.0
7.5°	1212.7	1161.9	1057.5	962.8	887.2	819.9	755.4	719.7	682.6	674.3	666.1
10°	1208.6	1141.3	1010.8	887.2	787.0	703.2	630.4	585.1	546.6	537.0	528.8
12.5°	1212.7	1130.3	966.9	817.2	697.7	602.9	520.5	473.8	438.1	428.5	423.0
15°	1222.3	1123.4	929.8	754.0	618.0	512.3	431.2	391.4	362.6	353.0	350.2
17.5°	1230.6	1116.6	890.0	692.2	538.4	432.6	362.6	329.6	304.9	295.3	292.5
20°	1241.6	1107.0	850.1	633.1	468.3	369.4	307.6	278.8	259.6	252.7	251.3
22.5°	1251.2	1100.1	813.1	574.1	403.8	318.6	266.4	243.1	229.4	222.5	222.5
25°	1275.9	1102.8	781.5	519.1	355.7	278.8	234.9	217.0	206.0	201.9	201.9
27.5°	1304.7	1113.8	756.7	472.5	314.5	248.6	212.9	197.8	192.3	186.8	188.2
30°	1345.9	1135.8	740.3	434.0	284.3	225.2	195.0	184.0	178.5	177.2	177.2
32.5°	1398.1	1171.5	738.9	409.3	262.3	207.4	182.7	173.0	170.3	168.9	168.9
35°	1459.9	1203.1	730.6	398.3	248.6	195.0	173.0	166.2	164.8	164.8	164.8
37.5°	1534.1	1255.3	725.2	383.2	241.7	188.2	166.2	160.7	160.7	160.7	160.7
40°	1611.0	1297.9	716.9	369.4	239.0	184.0	162.1	155.2	155.2	155.2	155.2
42.5°	1703.0	1359.7	714.2	362.6	234.9	181.3	156.6	148.3	149.7	149.7	151.1
45°	1814.3	1429.7	712.8	355.7	233.5	178.5	151.1	141.5	142.8	141.5	141.5
47.5°	1926.9	1510.7	716.9	351.6	232.1	175.8	147.0	134.6	134.6	133.2	133.2
50°	2045.0	1584.9	719.7	347.5	229.4	170.3	140.1	129.1	126.4	123.6	125.0
52.5°	2156.2	1653.6	721.0	340.6	221.1	162.1	134.6	122.2	118.1	114.0	115.4
55°	2267.5	1719.5	723.8	332.4	210.1	153.8	127.7	115.4	109.9	104.4	104.4
57.5°	2367.7	1777.2	716.9	311.8	197.8	145.6	120.9	107.1	98.9	93.4	93.4
60°	2436.4	1818.4	696.3	281.5	181.3	136.0	114.0	98.9	89.3	85.2	85.2
62.5°	2469.4	1825.3	659.2	232.1	160.7	126.4	105.8	90.6	82.4	79.7	79.7
65°	2437.8	1795.0	601.6	174.4	138.7	115.4	97.5	83.8	75.5	68.7	68.7
67.5°	2327.9	1709.9	521.9	131.8	118.1	104.4	89.3	76.9	67.3	61.8	61.8
70°	2106.8	1532.7	403.8	105.8	100.3	90.6	81.0	68.7	60.4	53.6	53.6
72.5°	1817.0	1299.2	284.3	85.2	85.2	76.9	68.7	60.4	52.2	46.7	46.7
75°	1394.0	961.4	190.9	68.7	70.0	64.5	56.3	49.4	43.9	39.8	39.8
77.5°	760.9	475.2	116.7	50.8	52.2	49.4	43.9	39.8	37.1	33.0	33.0
80°	369.4	208.8	67.3	35.7	37.1	35.7	33.0	28.8	28.8	26.1	26.1
82.5°	155.2	78.3	35.7	24.7	24.7	22.0	20.6	20.6	20.6	19.2	19.2
85°	38.5	15.1	15.1	13.7	13.7	13.7	12.4	12.4	12.4	9.6	11.0
87.5°	5.5	5.5	5.5	5.5	5.5	5.5	4.1	1.4	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)