

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: P842443

Luminaire Tested: **ARCH4-50-722-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842443
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: ARCH4-50-722-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2200K, 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: 5715 lumens
Efficiency: N/A
Efficacy: 107.4 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

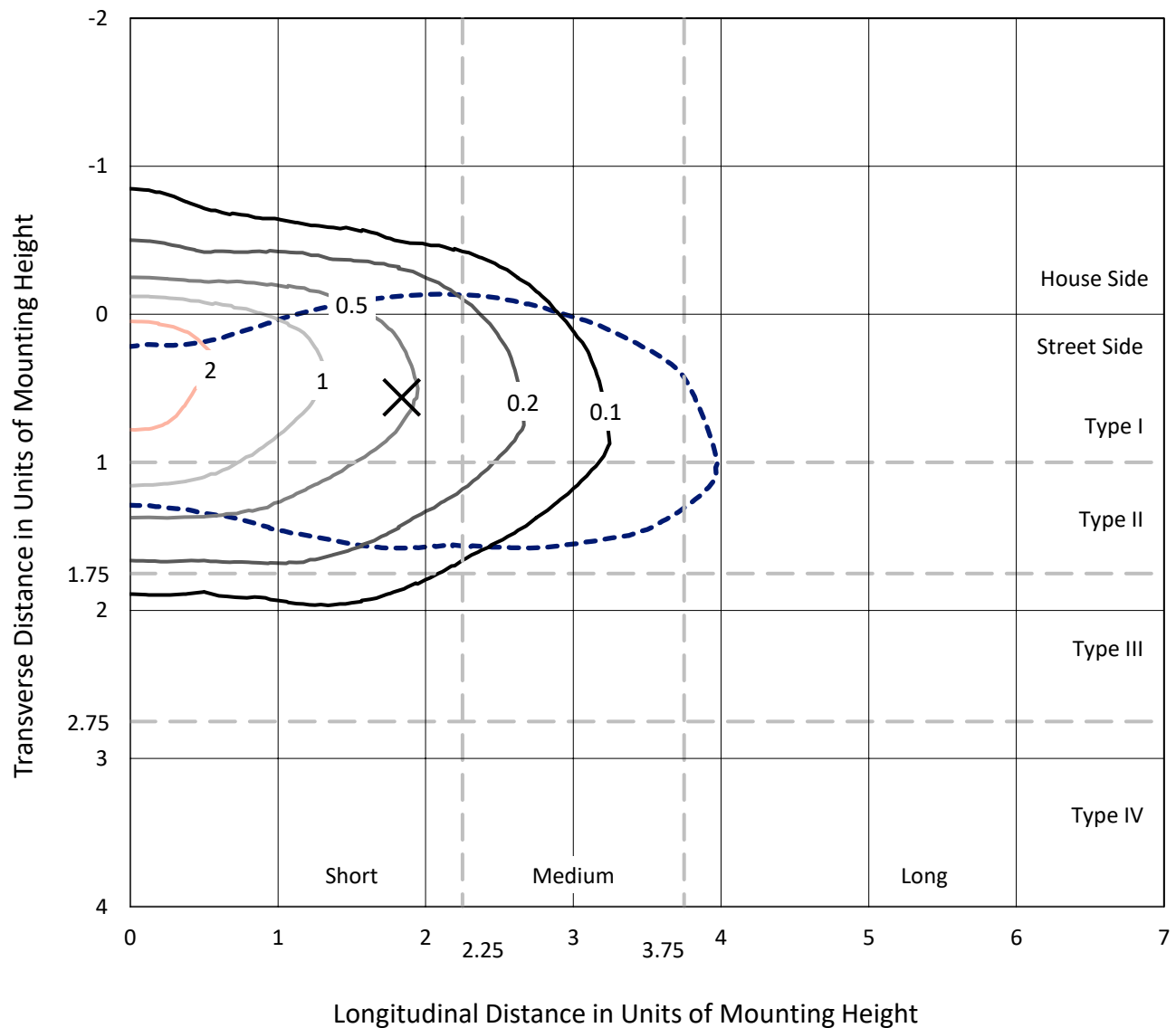


REPORT NUMBER: P842443

CATALOG NUMBER: ARCH4-50-722-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

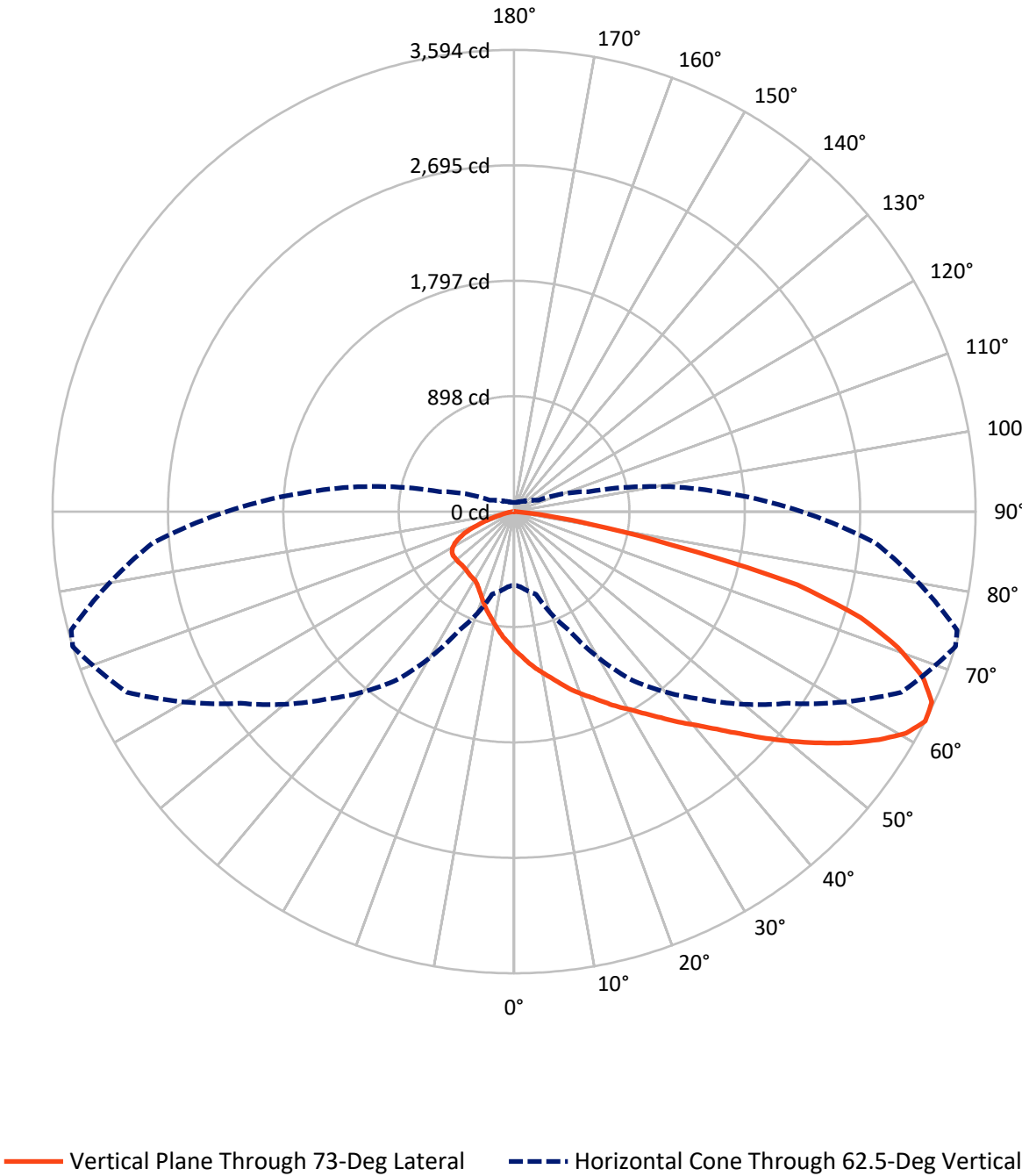
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
Type II - Short - N/A

REPORT NUMBER: P842443
CATALOG NUMBER: ARCH4-50-722-U-T2U-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P842443

CATALOG NUMBER: ARCH4-50-722-U-T2U-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	885.9	0.0	885.9
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	4829.1	0.0	4829.1
	% Fixture	84.5	0.0	84.5
Total	Lumens	5715.0	0.0	5715.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.5	1.8
10°-20°	315.5	5.5
20°-30°	525.1	9.2
30°-40°	792.3	13.9
40°-50°	1107.4	19.4
50°-60°	1223.2	21.4
60°-70°	1065.6	18.6
70°-80°	538.3	9.4
80°-90°	43.2	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°	5715.0	100.0
0°-180°	5715.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842443

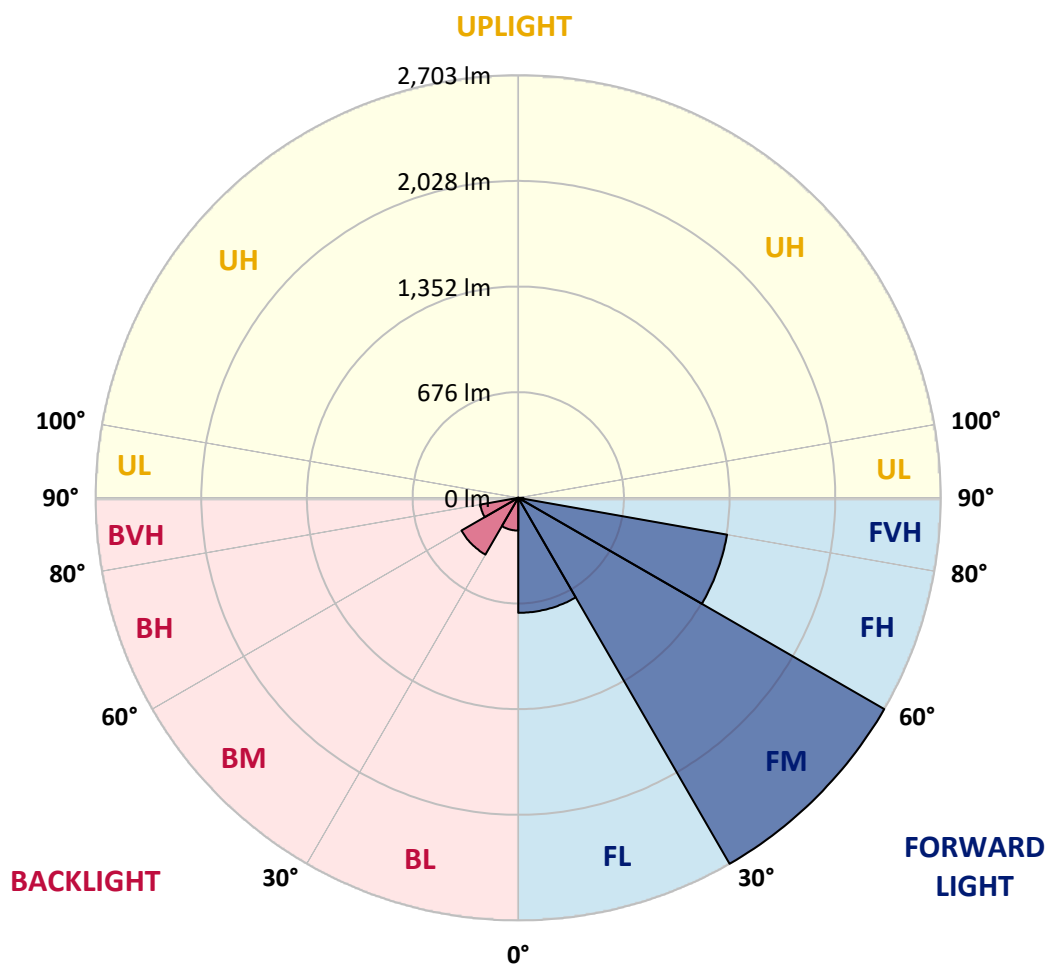
CATALOG NUMBER: ARCH4-50-722-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	735.7	12.9			
FM	(30°-60°)	2703.4	47.3			
FH	(60°-80°)	1356.6	23.7			G1/1800
FVH	(80°-90°)	33.4	0.6			G1/100
BL	(0°-30°)	209.4	3.7	B1/500		
BM	(30°-60°)	419.5	7.3	B1/1000		
BH	(60°-80°)	247.3	4.3	B1/500		G1/500
BVH	(80°-90°)	9.8	0.2			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: P842443

CATALOG NUMBER: ARCH4-50-722-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1
2.5°	1231.6	1245.3	1237.8	1242.8	1217.9	1201.7	1183.0	1146.9	1127.0	1124.5	1100.8
5°	1412.1	1427.1	1414.6	1410.9	1367.3	1330.0	1287.6	1224.1	1181.8	1174.3	1122.0
7.5°	1592.7	1606.4	1591.5	1580.3	1521.7	1455.7	1393.5	1300.1	1234.1	1221.6	1139.4
10°	1719.7	1732.2	1721.0	1709.8	1648.7	1581.5	1493.1	1371.1	1281.4	1261.5	1150.6
12.5°	1815.6	1823.1	1818.1	1808.1	1750.9	1678.6	1594.0	1450.7	1334.9	1310.0	1168.1
15°	1894.1	1906.5	1900.3	1892.8	1838.0	1765.8	1684.9	1534.2	1397.2	1366.1	1194.2
17.5°	1946.4	1955.1	1956.3	1956.3	1907.8	1836.8	1758.3	1610.1	1459.5	1419.6	1219.1
20°	1970.0	1980.0	1986.2	1996.2	1956.3	1895.3	1815.6	1674.9	1518.0	1473.2	1242.8
22.5°	1981.2	1990.0	2006.1	2028.6	1996.2	1945.1	1871.7	1734.7	1576.5	1529.2	1270.2
25°	1990.0	2001.2	2024.8	2067.2	2044.7	2001.2	1937.7	1803.2	1646.3	1597.7	1310.0
27.5°	2013.6	2027.3	2049.7	2100.8	2073.4	2052.2	2007.4	1876.6	1719.7	1669.9	1358.6
30°	2095.8	2107.0	2105.8	2138.1	2104.5	2098.3	2067.2	1947.6	1790.7	1740.9	1415.9
32.5°	2245.2	2256.4	2229.0	2216.6	2143.1	2144.4	2131.9	2023.6	1875.4	1824.3	1481.9
35°	2405.9	2418.3	2382.2	2361.0	2237.8	2201.7	2207.9	2118.2	1970.0	1919.0	1564.1
37.5°	2549.1	2564.0	2532.9	2501.8	2377.2	2293.8	2292.6	2224.1	2078.4	2026.1	1655.0
40°	2627.5	2645.0	2663.7	2646.2	2515.5	2423.3	2383.5	2332.4	2185.5	2131.9	1753.4
42.5°	2664.9	2713.5	2747.1	2735.9	2628.8	2535.4	2488.1	2445.7	2316.2	2263.9	1870.4
45°	2560.3	2561.5	2632.5	2693.5	2673.6	2611.3	2602.6	2572.7	2465.7	2415.8	2002.4
47.5°	2429.5	2419.6	2469.4	2577.7	2633.8	2650.0	2701.0	2713.5	2636.3	2586.4	2136.9
50°	2115.7	2122.0	2283.8	2439.5	2549.1	2653.7	2770.7	2857.9	2811.8	2764.5	2278.9
52.5°	1721.0	1735.9	1921.5	2263.9	2437.0	2616.3	2811.8	3002.4	2991.2	2946.3	2420.8
55°	1379.8	1403.4	1600.2	1971.3	2293.8	2532.9	2829.3	3134.4	3176.7	3135.6	2560.3
57.5°	1054.8	1079.7	1245.3	1626.3	2110.7	2397.2	2816.8	3250.2	3349.8	3323.6	2688.6
60°	794.5	819.4	925.2	1318.8	1881.6	2245.2	2754.6	3326.1	3505.5	3478.1	2782.0
62.5°	569.1	589.0	667.5	1026.1	1602.7	2064.7	2601.4	3327.4	3593.9	3571.5	2826.8
65°	409.7	409.7	473.2	732.2	1341.2	1848.0	2369.8	3174.2	3575.2	3569.0	2795.7
67.5°	295.1	297.6	348.7	511.8	1069.7	1585.2	2069.7	2901.5	3430.7	3461.9	2683.6
70°	209.2	215.4	239.1	357.4	808.2	1251.5	1748.4	2544.1	3170.5	3225.3	2466.9
72.5°	161.9	165.6	181.8	249.1	590.3	930.2	1393.5	2145.6	2823.0	2885.3	2171.8
75°	124.5	128.3	140.7	183.1	423.4	652.5	990.0	1664.9	2276.4	2387.2	1744.6
77.5°	90.9	95.9	104.6	133.2	246.6	414.7	600.2	936.4	1256.5	1308.8	914.0
80°	42.3	48.6	61.0	85.9	133.2	195.5	212.9	361.1	604.0	631.4	495.6
82.5°	23.7	29.9	34.9	52.3	67.2	69.7	72.2	90.9	227.9	251.5	208.0
85°	11.2	14.9	16.2	22.4	22.4	19.9	23.7	17.4	37.4	44.8	43.6
87.5°	0.0	1.2	2.5	6.2	5.0	3.7	3.7	3.7	3.7	5.0	3.7
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: P842443

CATALOG NUMBER: ARCH4-50-722-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1	1082.1
2.5°	1089.6	1073.4	1036.1	1003.7	982.5	963.8	938.9	927.7	907.8	911.5	900.3
5°	1095.8	1066.0	1000.0	938.9	894.1	854.3	810.7	785.8	758.4	755.9	747.2
7.5°	1099.6	1053.5	958.9	872.9	804.5	743.4	684.9	652.5	618.9	611.4	604.0
10°	1095.8	1034.8	916.5	804.5	713.5	637.6	571.6	530.5	495.6	486.9	479.4
12.5°	1099.6	1024.9	876.7	740.9	632.6	546.7	472.0	429.6	397.2	388.5	383.5
15°	1108.3	1018.6	843.1	683.7	560.4	464.5	391.0	354.9	328.8	320.0	317.5
17.5°	1115.8	1012.4	806.9	627.6	488.1	392.3	328.8	298.9	276.5	267.7	265.2
20°	1125.7	1003.7	770.8	574.1	424.6	335.0	278.9	252.8	235.4	229.1	227.9
22.5°	1134.4	997.5	737.2	520.5	366.1	288.9	241.6	220.4	208.0	201.7	201.7
25°	1156.9	1000.0	708.6	470.7	322.5	252.8	212.9	196.8	186.8	183.1	183.1
27.5°	1183.0	1009.9	686.1	428.4	285.2	225.4	193.0	179.3	174.3	169.4	170.6
30°	1220.4	1029.8	671.2	393.5	257.8	204.2	176.8	166.9	161.9	160.6	160.6
32.5°	1267.7	1062.2	670.0	371.1	237.8	188.0	165.6	156.9	154.4	153.2	153.2
35°	1323.7	1090.9	662.5	361.1	225.4	176.8	156.9	150.7	149.4	149.4	149.4
37.5°	1391.0	1138.2	657.5	347.4	219.2	170.6	150.7	145.7	145.7	145.7	145.7
40°	1460.7	1176.8	650.0	335.0	216.7	166.9	146.9	140.7	140.7	140.7	140.7
42.5°	1544.1	1232.8	647.5	328.8	212.9	164.4	142.0	134.5	135.7	135.7	137.0
45°	1645.0	1296.3	646.3	322.5	211.7	161.9	137.0	128.3	129.5	128.3	128.3
47.5°	1747.1	1369.8	650.0	318.8	210.5	159.4	133.2	122.0	122.0	120.8	120.8
50°	1854.2	1437.1	652.5	315.1	208.0	154.4	127.0	117.1	114.6	112.1	113.3
52.5°	1955.1	1499.3	653.8	308.8	200.5	146.9	122.0	110.8	107.1	103.4	104.6
55°	2056.0	1559.1	656.3	301.4	190.5	139.5	115.8	104.6	99.6	94.6	94.6
57.5°	2146.9	1611.4	650.0	282.7	179.3	132.0	109.6	97.1	89.7	84.7	84.7
60°	2209.1	1648.7	631.4	255.3	164.4	123.3	103.4	89.7	80.9	77.2	77.2
62.5°	2239.0	1655.0	597.7	210.5	145.7	114.6	95.9	82.2	74.7	72.2	72.2
65°	2210.4	1627.6	545.4	158.2	125.8	104.6	88.4	76.0	68.5	62.3	62.3
67.5°	2110.7	1550.4	473.2	119.5	107.1	94.6	80.9	69.7	61.0	56.0	56.0
70°	1910.3	1389.7	366.1	95.9	90.9	82.2	73.5	62.3	54.8	48.6	48.6
72.5°	1647.5	1178.0	257.8	77.2	77.2	69.7	62.3	54.8	47.3	42.3	42.3
75°	1264.0	871.7	173.1	62.3	63.5	58.5	51.1	44.8	39.8	36.1	36.1
77.5°	689.9	430.9	105.8	46.1	47.3	44.8	39.8	36.1	33.6	29.9	29.9
80°	335.0	189.3	61.0	32.4	33.6	32.4	29.9	26.2	26.2	23.7	23.7
82.5°	140.7	71.0	32.4	22.4	22.4	19.9	18.7	18.7	18.7	17.4	17.4
85°	34.9	13.7	13.7	12.5	12.5	12.5	11.2	11.2	11.2	8.7	10.0
87.5°	5.0	5.0	5.0	5.0	5.0	5.0	3.7	1.2	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)