

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: P842389

Luminaire Tested: **ARCH4-40-730-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842389
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: ARCH4-40-730-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 355mA 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: 5340 lumens
Efficiency: N/A
Efficacy: 121.9 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

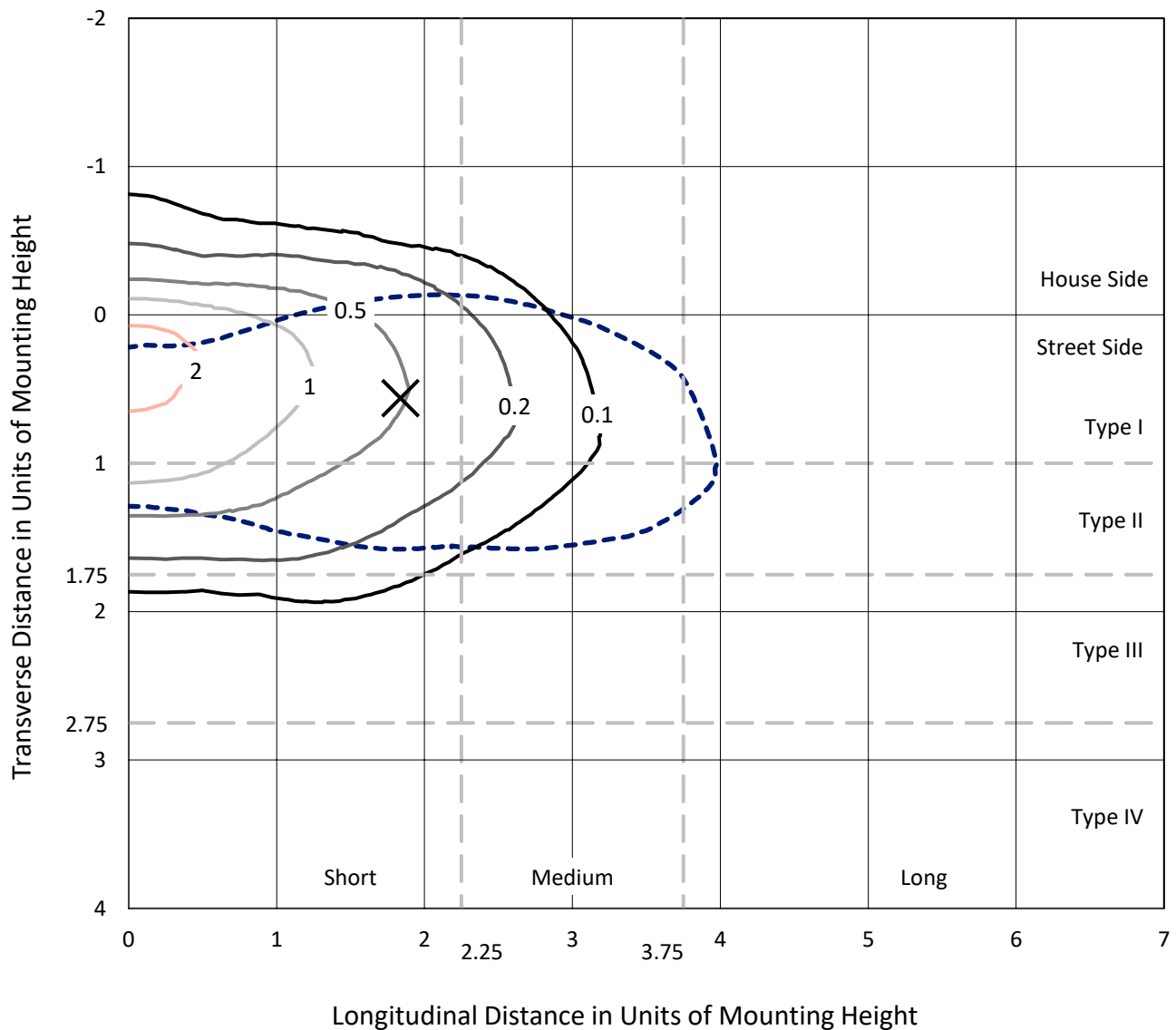


REPORT NUMBER: P842389

CATALOG NUMBER: ARCH4-40-730-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

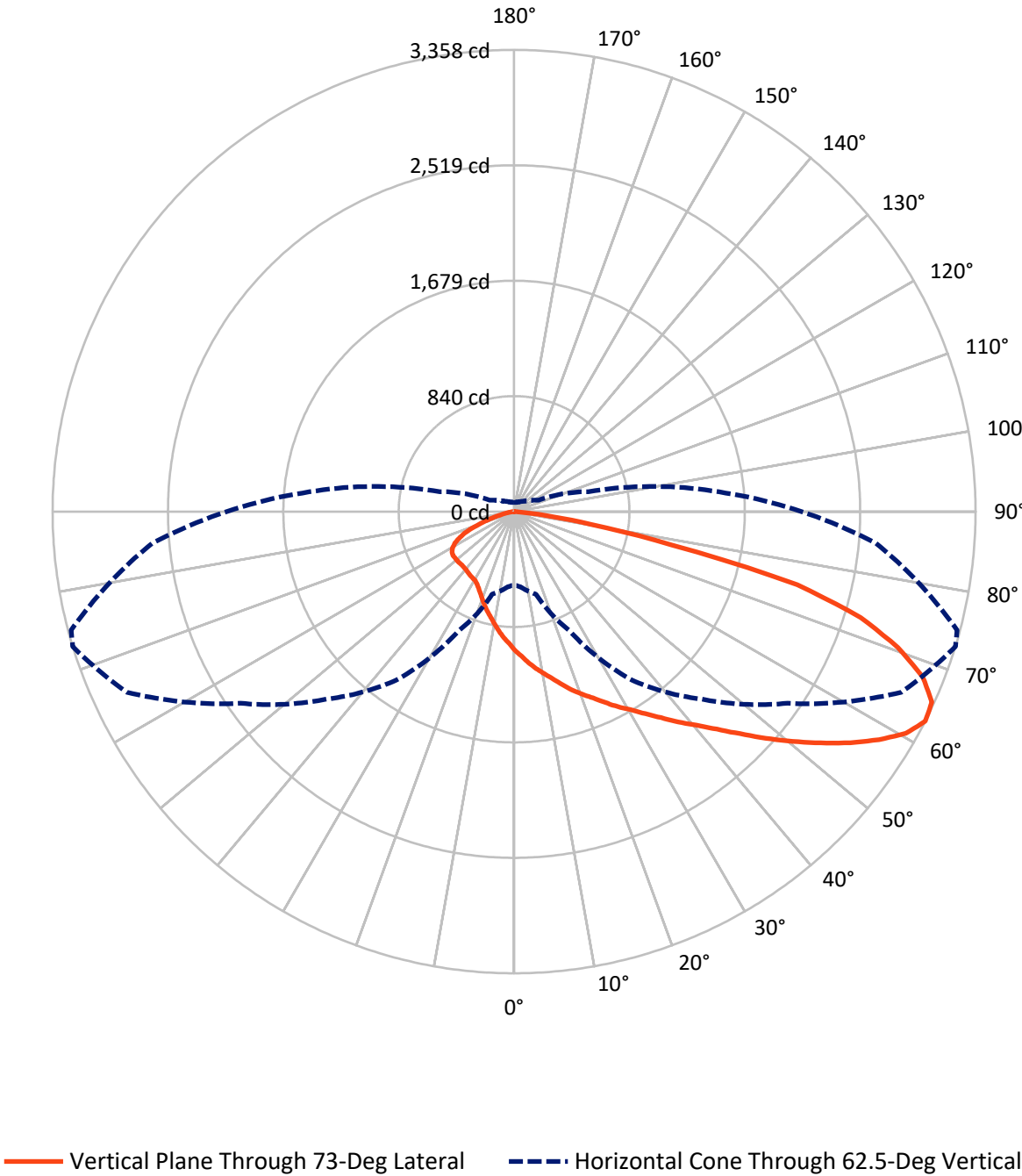
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
Type II - Short - N/A

REPORT NUMBER: P842389
CATALOG NUMBER: ARCH4-40-730-U-T2U-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P842389

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	827.8	0.0	827.8
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	4512.2	0.0	4512.2
	% Fixture	84.5	0.0	84.5
Total	Lumens	5340.0	0.0	5340.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.7	1.8
10°-20°	294.8	5.5
20°-30°	490.6	9.2
30°-40°	740.3	13.9
40°-50°	1034.7	19.4
50°-60°	1142.9	21.4
60°-70°	995.6	18.6
70°-80°	502.9	9.4
80°-90°	40.4	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°	5340.0	100.0
0°-180°	5340.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842389

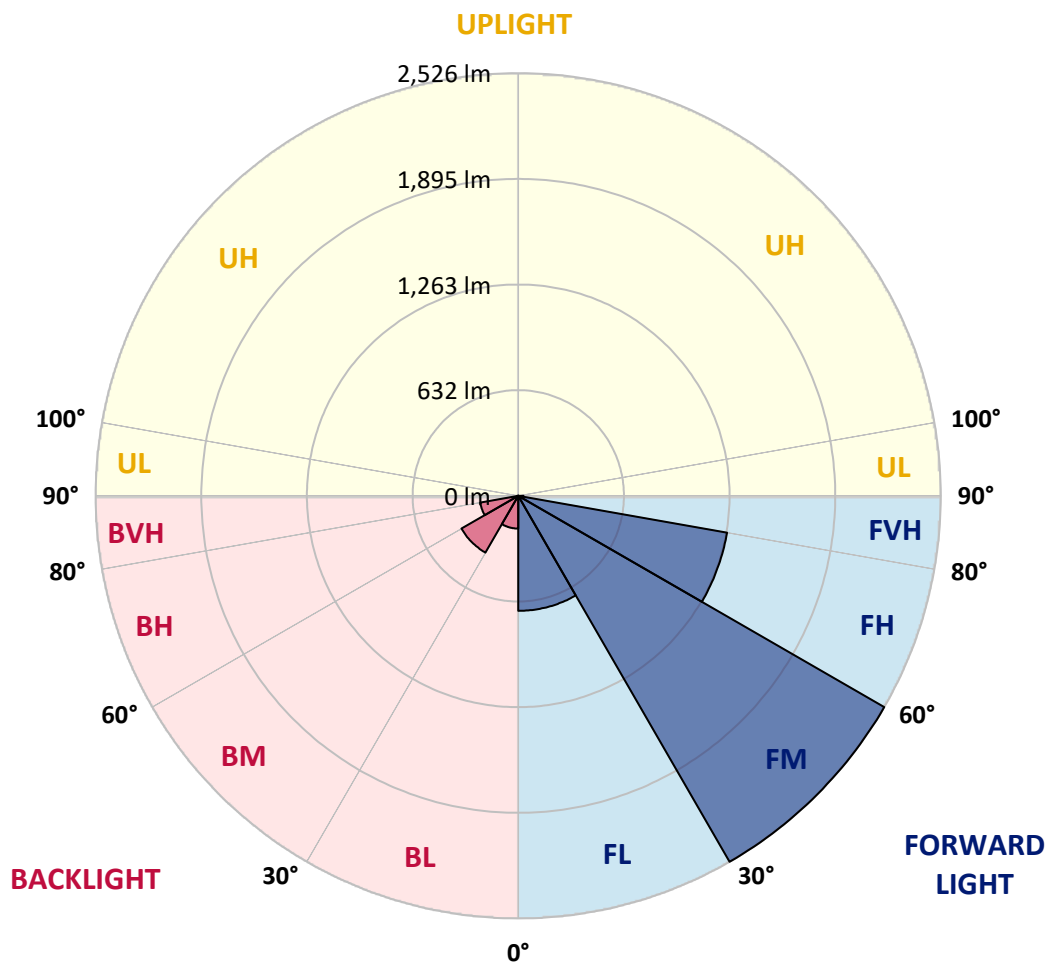
CATALOG NUMBER: ARCH4-40-730-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	687.4	12.9			
FM	(30°-60°)	2526.0	47.3			
FH	(60°-80°)	1267.5	23.7			G1/1800
FVH	(80°-90°)	31.2	0.6			G1/100
BL	(0°-30°)	195.7	3.7	B1/500		
BM	(30°-60°)	392.0	7.3	B1/1000		
BH	(60°-80°)	231.0	4.3	B1/500		G1/500
BVH	(80°-90°)	9.1	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: P842389

CATALOG NUMBER: ARCH4-40-730-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	1011.1	1011.1	1011.1	1011.1	1011.1	1011.1	1011.1	1011.1	1011.1	1011.1	1011.1
2.5°	1150.8	1163.6	1156.6	1161.2	1138.0	1122.8	1105.4	1071.6	1053.0	1050.7	1028.6
5°	1319.5	1333.4	1321.8	1318.3	1277.6	1242.7	1203.1	1143.8	1104.2	1097.2	1048.4
7.5°	1488.2	1501.0	1487.0	1476.6	1421.9	1360.2	1302.0	1214.8	1153.1	1141.5	1064.7
10°	1606.9	1618.5	1608.1	1597.6	1540.6	1477.7	1395.1	1281.1	1197.3	1178.7	1075.1
12.5°	1696.5	1703.5	1698.8	1689.5	1636.0	1568.5	1489.4	1355.6	1247.3	1224.1	1091.4
15°	1769.8	1781.4	1775.6	1768.6	1717.4	1649.9	1574.3	1433.5	1305.5	1276.4	1115.9
17.5°	1818.7	1826.8	1828.0	1828.0	1782.6	1716.3	1643.0	1504.5	1363.7	1326.5	1139.1
20°	1840.8	1850.1	1855.9	1865.2	1828.0	1771.0	1696.5	1565.0	1418.4	1376.5	1161.2
22.5°	1851.2	1859.4	1874.5	1895.5	1865.2	1817.5	1748.8	1620.8	1473.1	1428.9	1186.8
25°	1859.4	1869.9	1892.0	1931.5	1910.6	1869.9	1810.5	1684.8	1538.2	1492.9	1224.1
27.5°	1881.5	1894.3	1915.2	1962.9	1937.3	1917.6	1875.7	1753.5	1606.9	1560.3	1269.5
30°	1958.3	1968.8	1967.6	1997.8	1966.4	1960.6	1931.5	1819.8	1673.2	1626.7	1323.0
32.5°	2097.9	2108.4	2082.8	2071.2	2002.5	2003.7	1992.0	1890.8	1752.3	1704.6	1384.6
35°	2248.0	2259.6	2225.9	2206.1	2090.9	2057.2	2063.0	1979.2	1840.8	1793.1	1461.4
37.5°	2381.8	2395.8	2366.7	2337.6	2221.3	2143.3	2142.1	2078.1	1942.0	1893.1	1546.4
40°	2455.1	2471.4	2488.9	2472.6	2350.4	2264.3	2227.1	2179.4	2042.1	1992.0	1638.3
42.5°	2490.0	2535.4	2566.8	2556.4	2456.3	2369.0	2324.8	2285.2	2164.2	2115.4	1747.7
45°	2392.3	2393.5	2459.8	2516.8	2498.2	2440.0	2431.9	2403.9	2303.9	2257.3	1871.0
47.5°	2270.1	2260.8	2307.4	2408.6	2460.9	2476.1	2523.8	2535.4	2463.3	2416.7	1996.7
50°	1976.9	1982.7	2134.0	2279.4	2381.8	2479.6	2588.9	2670.4	2627.3	2583.1	2129.3
52.5°	1608.1	1622.0	1795.4	2115.4	2277.1	2444.7	2627.3	2805.4	2794.9	2753.0	2262.0
55°	1289.2	1311.3	1495.2	1841.9	2143.3	2366.7	2643.6	2928.7	2968.3	2929.9	2392.3
57.5°	985.5	1008.8	1163.6	1519.6	1972.2	2239.9	2632.0	3036.9	3130.0	3105.6	2512.1
60°	742.4	765.6	864.5	1232.2	1758.2	2097.9	2573.8	3107.9	3275.4	3249.8	2599.4
62.5°	531.8	550.4	623.7	958.8	1497.5	1929.2	2430.7	3109.1	3358.1	3337.1	2641.3
65°	382.8	382.8	442.2	684.2	1253.2	1726.7	2214.3	2965.9	3340.6	3334.8	2612.2
67.5°	275.8	278.1	325.8	478.2	999.5	1481.2	1933.8	2711.1	3205.6	3234.7	2507.5
70°	195.5	201.3	223.4	333.9	755.2	1169.4	1633.6	2377.2	2962.4	3013.6	2305.0
72.5°	151.3	154.8	169.9	232.7	551.5	869.2	1302.0	2004.8	2637.8	2696.0	2029.3
75°	116.4	119.8	131.5	171.0	395.6	609.7	925.0	1555.7	2127.0	2230.6	1630.2
77.5°	84.9	89.6	97.7	124.5	230.4	387.5	560.8	875.0	1174.0	1222.9	854.1
80°	39.6	45.4	57.0	80.3	124.5	182.7	199.0	337.4	564.3	589.9	463.1
82.5°	22.1	27.9	32.6	48.9	62.8	65.2	67.5	84.9	212.9	235.0	194.3
85°	10.5	14.0	15.1	20.9	20.9	18.6	22.1	16.3	34.9	41.9	40.7
87.5°	0.0	1.2	2.3	5.8	4.7	3.5	3.5	3.5	3.5	4.7	3.5
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: P842389

CATALOG NUMBER: ARCH4-40-730-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1011.1	1011.1	1011.1	1011.1	1011.1	1011.1	1011.1	1011.1	1011.1	1011.1	1011.1
2.5°	1018.1	1003.0	968.1	937.8	918.1	900.6	877.3	866.9	848.2	851.7	841.3
5°	1023.9	996.0	934.3	877.3	835.4	798.2	757.5	734.2	708.6	706.3	698.1
7.5°	1027.4	984.4	895.9	815.7	751.7	694.6	640.0	609.7	578.3	571.3	564.3
10°	1023.9	966.9	856.4	751.7	666.7	595.7	534.1	495.7	463.1	455.0	448.0
12.5°	1027.4	957.6	819.2	692.3	591.1	510.8	441.0	401.4	371.2	363.0	358.4
15°	1035.6	951.8	787.7	638.8	523.6	434.0	365.4	331.6	307.2	299.0	296.7
17.5°	1042.6	946.0	754.0	586.4	456.1	366.5	307.2	279.3	258.3	250.2	247.8
20°	1051.9	937.8	720.2	536.4	396.8	313.0	260.6	236.2	219.9	214.1	212.9
22.5°	1060.0	932.0	688.8	486.4	342.1	269.9	225.7	206.0	194.3	188.5	188.5
25°	1081.0	934.3	662.1	439.8	301.4	236.2	199.0	183.8	174.5	171.0	171.0
27.5°	1105.4	943.7	641.1	400.3	266.5	210.6	180.4	167.6	162.9	158.2	159.4
30°	1140.3	962.3	627.2	367.7	240.9	190.8	165.2	155.9	151.3	150.1	150.1
32.5°	1184.5	992.5	626.0	346.7	222.2	175.7	154.8	146.6	144.3	143.1	143.1
35°	1236.9	1019.3	619.0	337.4	210.6	165.2	146.6	140.8	139.6	139.6	139.6
37.5°	1299.7	1063.5	614.4	324.6	204.8	159.4	140.8	136.1	136.1	136.1	136.1
40°	1364.9	1099.6	607.4	313.0	202.5	155.9	137.3	131.5	131.5	131.5	131.5
42.5°	1442.8	1151.9	605.1	307.2	199.0	153.6	132.6	125.7	126.8	126.8	128.0
45°	1537.1	1211.3	603.9	301.4	197.8	151.3	128.0	119.8	121.0	119.8	119.8
47.5°	1632.5	1279.9	607.4	297.9	196.6	148.9	124.5	114.0	114.0	112.9	112.9
50°	1732.6	1342.8	609.7	294.4	194.3	144.3	118.7	109.4	107.0	104.7	105.9
52.5°	1826.8	1400.9	610.9	288.6	187.3	137.3	114.0	103.6	100.1	96.6	97.7
55°	1921.1	1456.8	613.2	281.6	178.0	130.3	108.2	97.7	93.1	88.4	88.4
57.5°	2006.0	1505.7	607.4	264.1	167.6	123.3	102.4	90.8	83.8	79.1	79.1
60°	2064.2	1540.6	589.9	238.5	153.6	115.2	96.6	83.8	75.6	72.1	72.1
62.5°	2092.1	1546.4	558.5	196.6	136.1	107.0	89.6	76.8	69.8	67.5	67.5
65°	2065.3	1520.8	509.6	147.8	117.5	97.7	82.6	71.0	64.0	58.2	58.2
67.5°	1972.2	1448.6	442.2	111.7	100.1	88.4	75.6	65.2	57.0	52.4	52.4
70°	1784.9	1298.5	342.1	89.6	84.9	76.8	68.7	58.2	51.2	45.4	45.4
72.5°	1539.4	1100.7	240.9	72.1	72.1	65.2	58.2	51.2	44.2	39.6	39.6
75°	1181.0	814.5	161.7	58.2	59.3	54.7	47.7	41.9	37.2	33.7	33.7
77.5°	644.6	402.6	98.9	43.1	44.2	41.9	37.2	33.7	31.4	27.9	27.9
80°	313.0	176.9	57.0	30.3	31.4	30.3	27.9	24.4	24.4	22.1	22.1
82.5°	131.5	66.3	30.3	20.9	20.9	18.6	17.5	17.5	17.5	16.3	16.3
85°	32.6	12.8	12.8	11.6	11.6	11.6	10.5	10.5	10.5	8.1	9.3
87.5°	4.7	4.7	4.7	4.7	4.7	4.7	3.5	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)