

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: P842627

Luminaire Tested: **ARCH4-70-740-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842627
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-70-740-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 605mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9320 lumens
Efficiency: N/A
Efficacy: 126.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 73.8
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



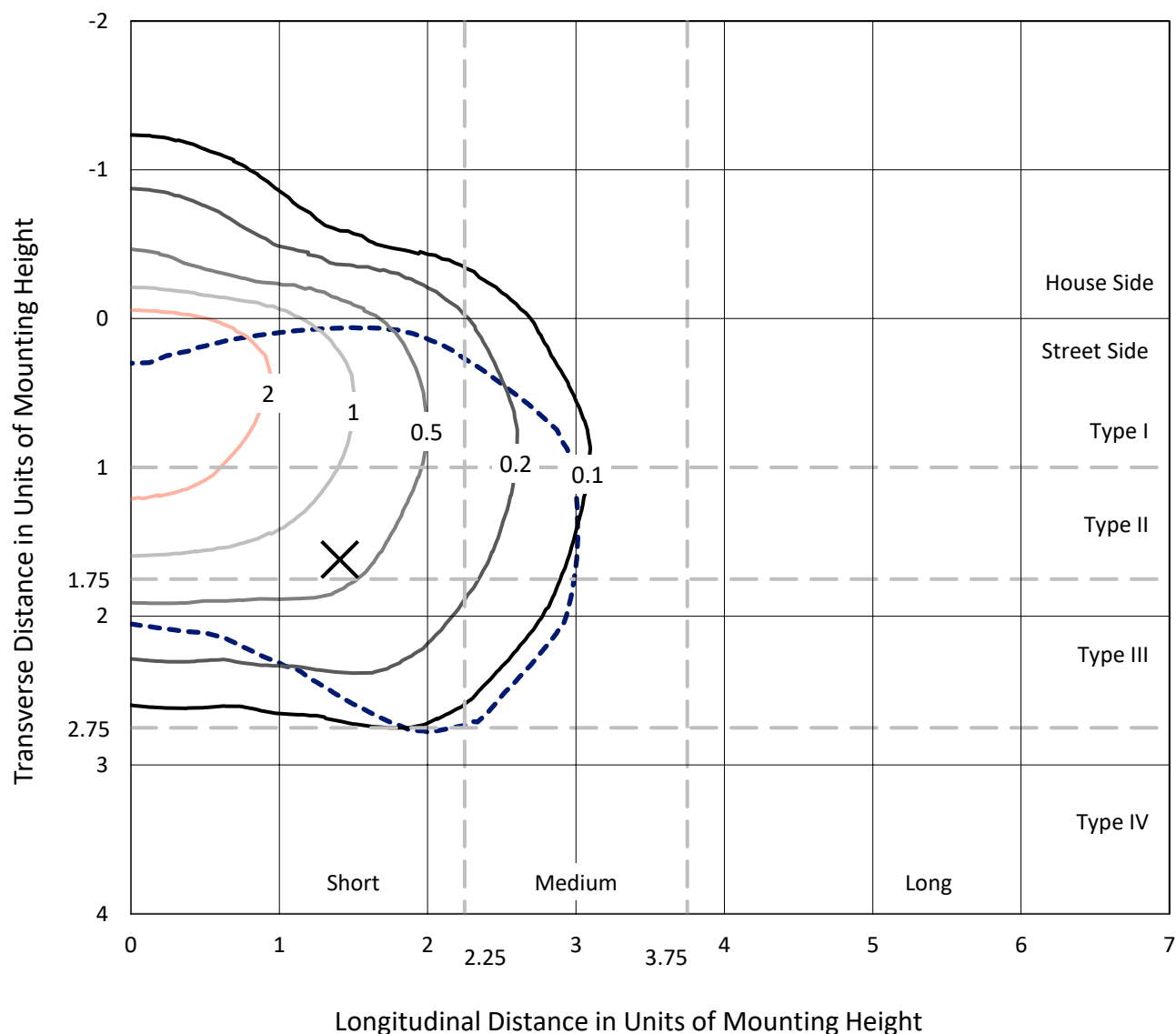
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

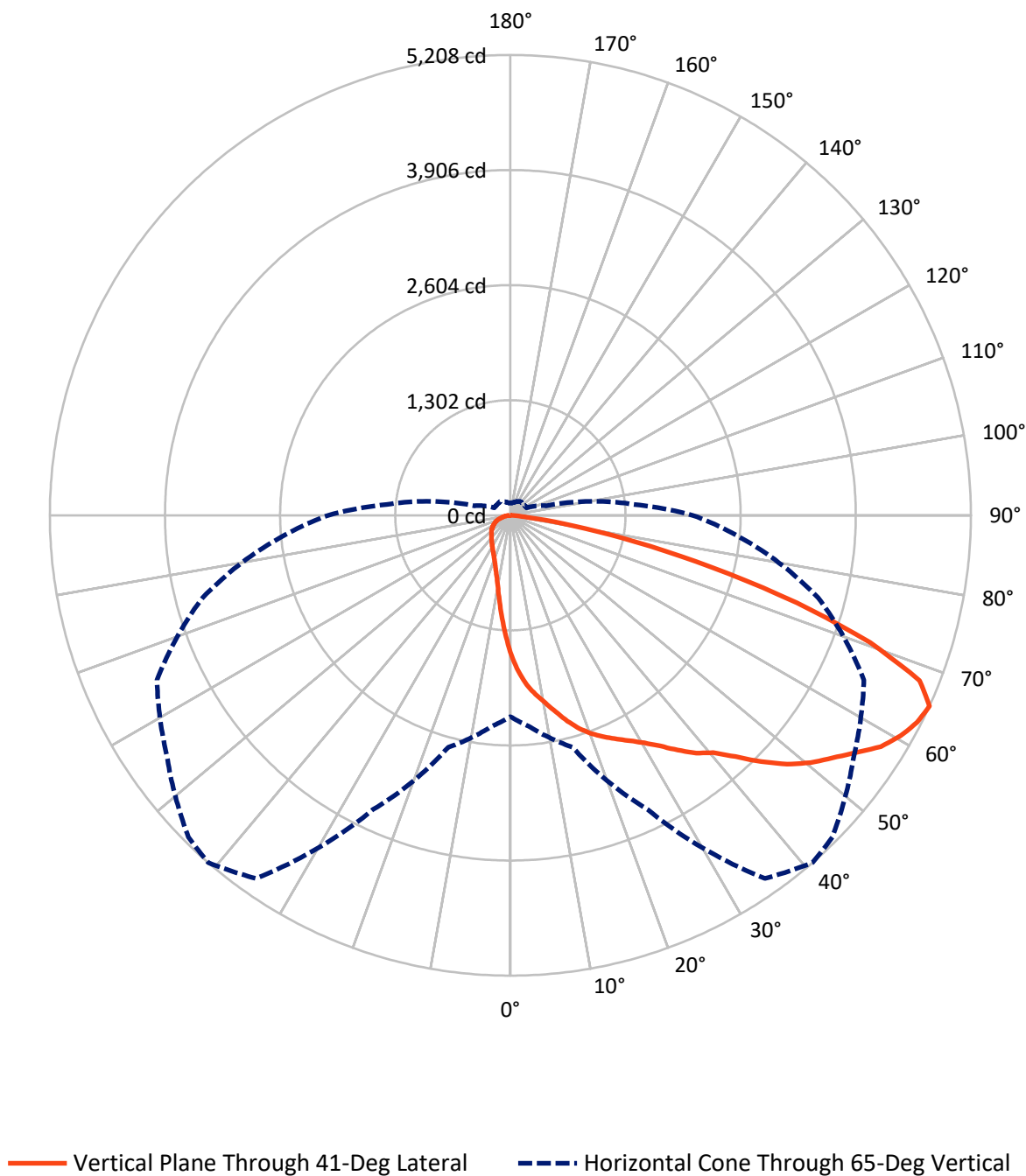


Based on 25 foot mounting height. Maximum calculated value = 3.7 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1196.5	0.0	1196.5
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	8123.5	0.0	8123.5
	% Fixture	87.2	0.0	87.2
Total	Lumens	9320.0	0.0	9320.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.0	1.6
10°-20°	443.7	4.8
20°-30°	763.3	8.2
30°-40°	1157.7	12.4
40°-50°	1696.0	18.2
50°-60°	2141.7	23.0
60°-70°	2008.2	21.5
70°-80°	895.1	9.6
80°-90°	66.3	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°	9320.0	100.0
0°-180°	9320.0	100.0

Coefficient of Utilization



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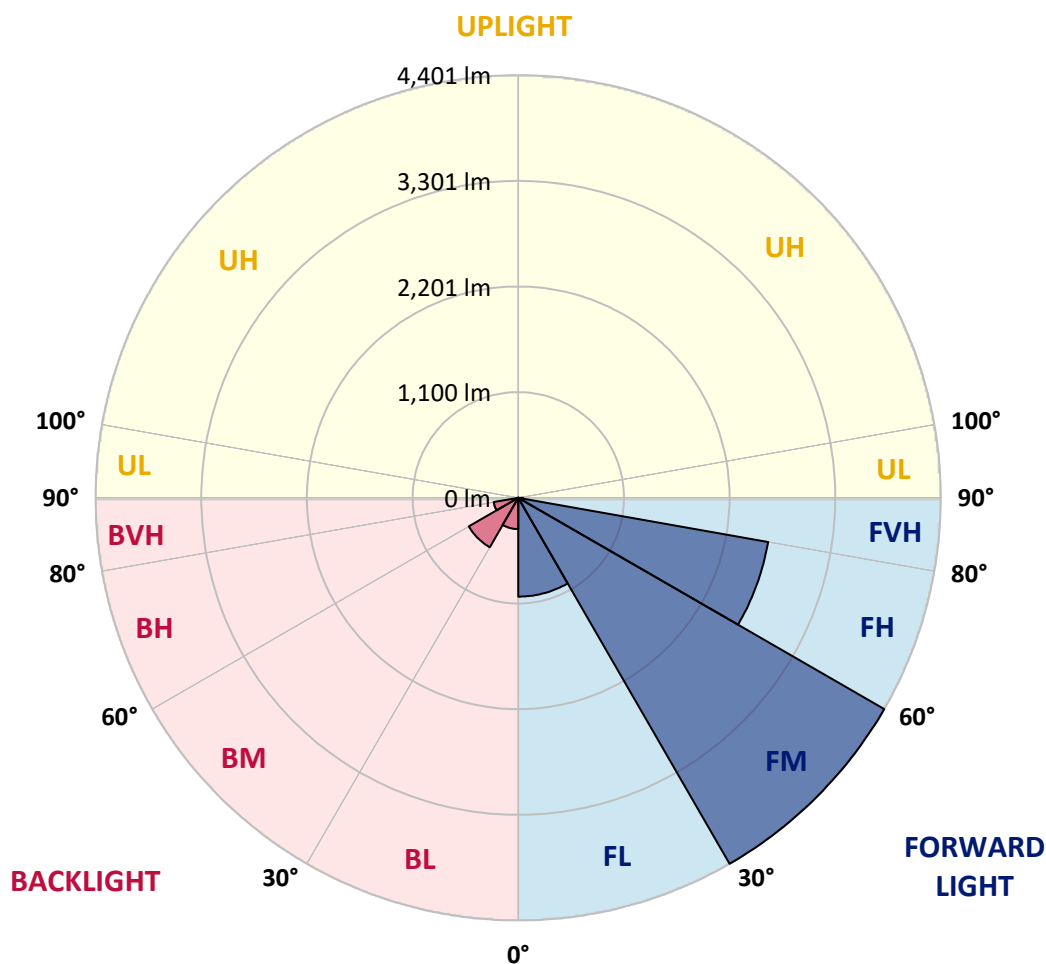
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1029.3	11.0			
FM	(30°-60°)	4401.3	47.2			
FH	(60°-80°)	2643.4	28.4			G2/5000
FVH	(80°-90°)	49.5	0.5			G1/100
BL	(0°-30°)	325.7	3.5	B1/500		
BM	(30°-60°)	594.1	6.4	B1/1000		
BH	(60°-80°)	259.9	2.8	B1/500		G1/500
BVH	(80°-90°)	16.8	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-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	1588.1	1588.1	1588.1	1588.1	1588.1	1588.1	1588.1	1588.1	1588.1	1588.1	1588.1
2.5°	1831.8	1825.9	1822.0	1800.3	1800.3	1770.9	1772.8	1745.3	1711.9	1658.8	1601.8
5°	2004.8	1996.9	1987.1	1965.4	1957.6	1928.1	1924.2	1884.9	1827.9	1735.5	1633.3
7.5°	2156.1	2148.2	2134.5	2103.0	2081.4	2046.0	2036.2	1985.1	1922.2	1808.2	1664.7
10°	2293.7	2287.8	2270.1	2230.8	2201.3	2158.1	2140.4	2071.6	1993.0	1867.2	1690.3
12.5°	2433.2	2425.4	2401.8	2368.4	2333.0	2281.9	2260.3	2171.8	2071.6	1932.0	1727.6
15°	2562.9	2551.1	2533.5	2498.1	2466.6	2417.5	2393.9	2289.7	2167.9	2004.8	1776.8
17.5°	2647.5	2637.6	2621.9	2602.2	2576.7	2539.4	2515.8	2413.6	2264.2	2075.5	1827.9
20°	2698.6	2694.6	2688.7	2676.9	2665.1	2639.6	2621.9	2525.6	2368.4	2144.3	1877.0
22.5°	2737.9	2733.9	2732.0	2732.0	2733.9	2724.1	2712.3	2629.8	2468.6	2217.0	1922.2
25°	2798.8	2796.8	2792.9	2789.0	2802.7	2804.7	2800.8	2743.8	2594.4	2313.3	1979.2
27.5°	2883.3	2877.4	2869.5	2865.6	2879.4	2889.2	2897.1	2857.8	2728.0	2411.6	2044.1
30°	3013.0	2995.3	2975.7	2961.9	2971.8	2987.5	3005.2	2981.6	2865.6	2533.5	2110.9
32.5°	3166.3	3144.7	3099.5	3074.0	3099.5	3111.3	3125.1	3113.3	3009.1	2665.1	2177.7
35°	3353.0	3327.5	3280.3	3243.0	3288.2	3262.6	3256.7	3244.9	3144.7	2794.9	2252.4
37.5°	3663.6	3626.2	3551.6	3469.0	3469.0	3414.0	3392.4	3357.0	3266.6	2910.8	2325.1
40°	4023.3	3974.1	3877.8	3756.0	3643.9	3529.9	3516.2	3490.6	3410.0	3044.5	2407.7
42.5°	4418.3	4324.0	4190.3	4042.9	3862.1	3732.4	3700.9	3628.2	3549.6	3180.1	2490.2
45°	4856.6	4660.1	4465.5	4390.8	4092.1	3974.1	3915.2	3783.5	3695.0	3321.6	2576.7
47.5°	4927.4	4774.1	4644.3	4632.6	4306.3	4208.0	4141.2	3952.5	3852.3	3472.9	2667.1
50°	4888.1	4795.7	4809.4	4762.3	4463.5	4398.7	4347.6	4133.3	4007.5	3618.4	2749.7
52.5°	4723.0	4774.1	4852.7	4766.2	4612.9	4559.8	4534.3	4327.9	4153.0	3752.0	2824.3
55°	4526.4	4561.8	4730.8	4837.0	4785.9	4738.7	4715.1	4553.9	4296.5	3864.1	2893.1
57.5°	4239.5	4223.7	4410.5	4825.2	4966.7	4939.2	4913.6	4776.0	4430.1	3944.6	2936.4
60°	3809.0	3775.6	4011.5	4589.3	5025.6	5068.9	5057.1	4923.4	4532.3	3942.7	2918.7
62.5°	3064.1	3146.7	3472.9	4204.1	5051.2	5161.3	5139.6	4935.2	4565.7	3828.7	2806.7
65°	2278.0	2395.9	2716.2	3673.4	5015.8	5208.4	5149.5	4742.6	4410.5	3602.7	2561.0
67.5°	1641.1	1745.3	1979.2	3022.9	4675.8	4992.2	4923.4	4428.1	4052.7	3282.3	2221.0
70°	1122.3	1197.0	1356.2	2201.3	3991.8	4316.1	4272.9	3958.4	3488.7	2901.0	1804.3
72.5°	792.1	823.5	925.7	1452.5	3032.7	3386.5	3335.4	3256.7	2802.7	2411.6	1403.3
75°	593.6	613.2	668.3	939.5	2046.0	2346.7	2299.6	2344.8	2093.2	1825.9	1022.0
77.5°	224.1	243.7	379.3	599.5	1210.7	1440.7	1393.5	1421.0	1163.5	921.8	509.1
80°	60.9	64.9	125.8	285.0	550.3	717.4	652.5	560.2	432.4	424.5	269.3
82.5°	25.6	29.5	57.0	153.3	196.5	196.5	165.1	204.4	165.1	198.5	129.7
85°	9.8	11.8	13.8	39.3	25.6	27.5	29.5	39.3	33.4	41.3	29.5
87.5°	0.0	0.0	0.0	2.0	2.0	3.9	2.0	3.9	5.9	5.9	5.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1588.1	1588.1	1588.1	1588.1	1588.1	1588.1	1588.1	1588.1	1588.1	1588.1	1588.1
2.5°	1578.3	1556.6	1525.2	1474.1	1421.0	1391.5	1354.2	1348.3	1309.0	1305.1	1289.3
5°	1588.1	1542.9	1462.3	1364.0	1267.7	1193.0	1138.0	1108.5	1051.5	1051.5	1035.8
7.5°	1595.9	1525.2	1395.5	1250.0	1118.3	1018.1	943.4	912.0	860.9	856.9	845.1
10°	1597.9	1503.6	1322.7	1134.1	972.9	870.7	798.0	762.6	717.4	713.5	705.6
12.5°	1613.6	1491.8	1257.9	1033.8	868.7	758.7	687.9	658.4	623.0	619.1	611.3
15°	1639.2	1491.8	1202.9	949.3	776.4	674.1	613.2	585.7	560.2	556.2	552.3
17.5°	1664.7	1487.8	1147.8	870.7	699.7	607.3	554.3	532.6	513.0	511.0	507.1
20°	1688.3	1485.9	1092.8	803.9	640.7	552.3	511.0	491.4	475.6	475.6	473.7
22.5°	1711.9	1481.9	1039.7	741.0	589.6	511.0	475.6	454.0	442.2	442.2	440.3
25°	1747.3	1481.9	990.6	687.9	548.4	479.6	444.2	428.5	418.6	416.7	416.7
27.5°	1788.6	1493.7	947.3	640.7	513.0	448.1	420.6	404.9	393.1	389.2	391.1
30°	1833.8	1503.6	908.0	599.5	479.6	424.5	395.1	379.3	367.5	363.6	365.6
32.5°	1879.0	1515.4	872.7	562.1	446.2	402.9	373.4	355.7	344.0	342.0	342.0
35°	1928.1	1527.2	837.3	530.7	418.6	381.3	353.8	334.1	326.3	322.3	324.3
37.5°	1977.2	1546.8	803.9	501.2	399.0	361.6	336.1	316.4	310.5	308.6	308.6
40°	2036.2	1576.3	790.1	481.5	381.3	344.0	322.3	302.7	296.8	296.8	296.8
42.5°	2085.3	1599.9	778.3	459.9	367.5	328.2	308.6	292.9	288.9	287.0	288.9
45°	2134.5	1621.5	762.6	440.3	349.8	312.5	296.8	281.1	277.1	277.1	277.1
47.5°	2183.6	1633.3	741.0	420.6	334.1	298.7	285.0	271.2	267.3	267.3	267.3
50°	2222.9	1643.1	709.5	399.0	316.4	287.0	273.2	259.4	255.5	255.5	255.5
52.5°	2262.2	1645.1	676.1	373.4	298.7	273.2	261.4	247.6	243.7	241.7	241.7
55°	2297.6	1643.1	636.8	344.0	279.1	257.5	247.6	235.9	228.0	220.1	224.1
57.5°	2323.2	1641.1	591.6	314.5	259.4	241.7	237.8	222.1	206.4	186.7	190.6
60°	2313.3	1619.5	542.5	277.1	237.8	226.0	226.0	204.4	176.9	167.1	169.0
62.5°	2250.4	1558.6	491.4	237.8	216.2	210.3	208.3	184.8	163.1	153.3	155.3
65°	2061.8	1405.3	416.7	202.4	194.6	192.6	192.6	171.0	151.3	139.5	141.5
67.5°	1774.8	1179.3	340.0	171.0	173.0	176.9	176.9	157.2	137.6	125.8	127.8
70°	1423.0	921.8	271.2	147.4	149.4	155.3	159.2	141.5	123.8	112.0	112.0
72.5°	1071.2	699.7	218.2	123.8	133.7	133.7	139.5	125.8	108.1	96.3	98.3
75°	776.4	501.2	173.0	104.2	116.0	114.0	114.0	106.1	92.4	84.5	84.5
77.5°	367.5	263.4	137.6	74.7	90.4	88.4	90.4	84.5	78.6	70.8	72.7
80°	180.8	129.7	88.4	53.1	62.9	64.9	70.8	66.8	64.9	59.0	59.0
82.5°	86.5	51.1	41.3	37.3	43.2	45.2	49.1	49.1	51.1	47.2	47.2
85°	23.6	13.8	17.7	23.6	27.5	29.5	33.4	35.4	35.4	33.4	35.4
87.5°	5.9	5.9	7.9	11.8	13.8	15.7	17.7	17.7	7.9	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)