

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: P836789

Luminaire Tested: **ARCH3-70-750-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836789
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-70-750-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 580mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8484 lumens
Efficiency: N/A
Efficacy: 116.1 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 73.1
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

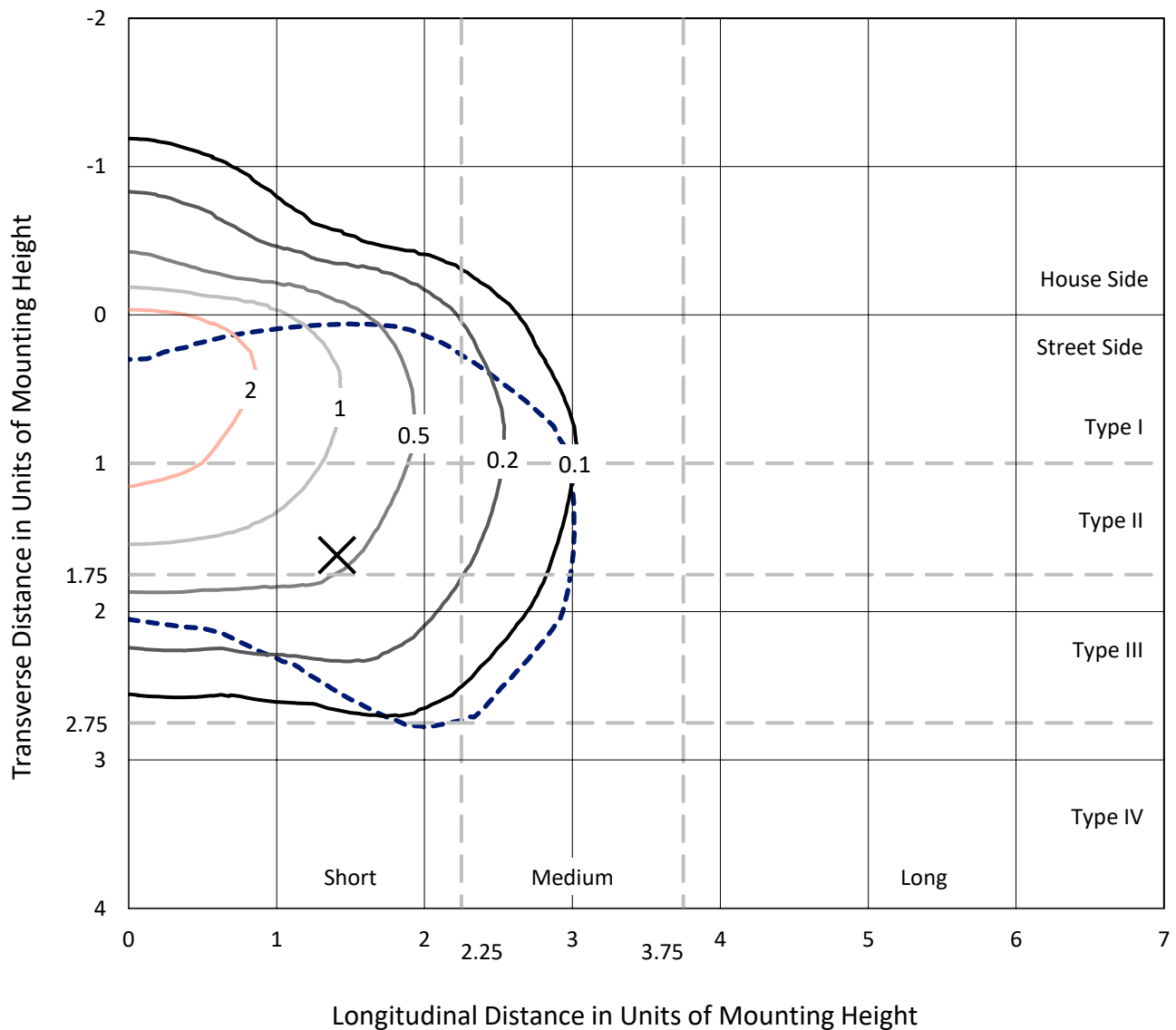


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Iso-Footcandle Lines of Horizontal Illumination

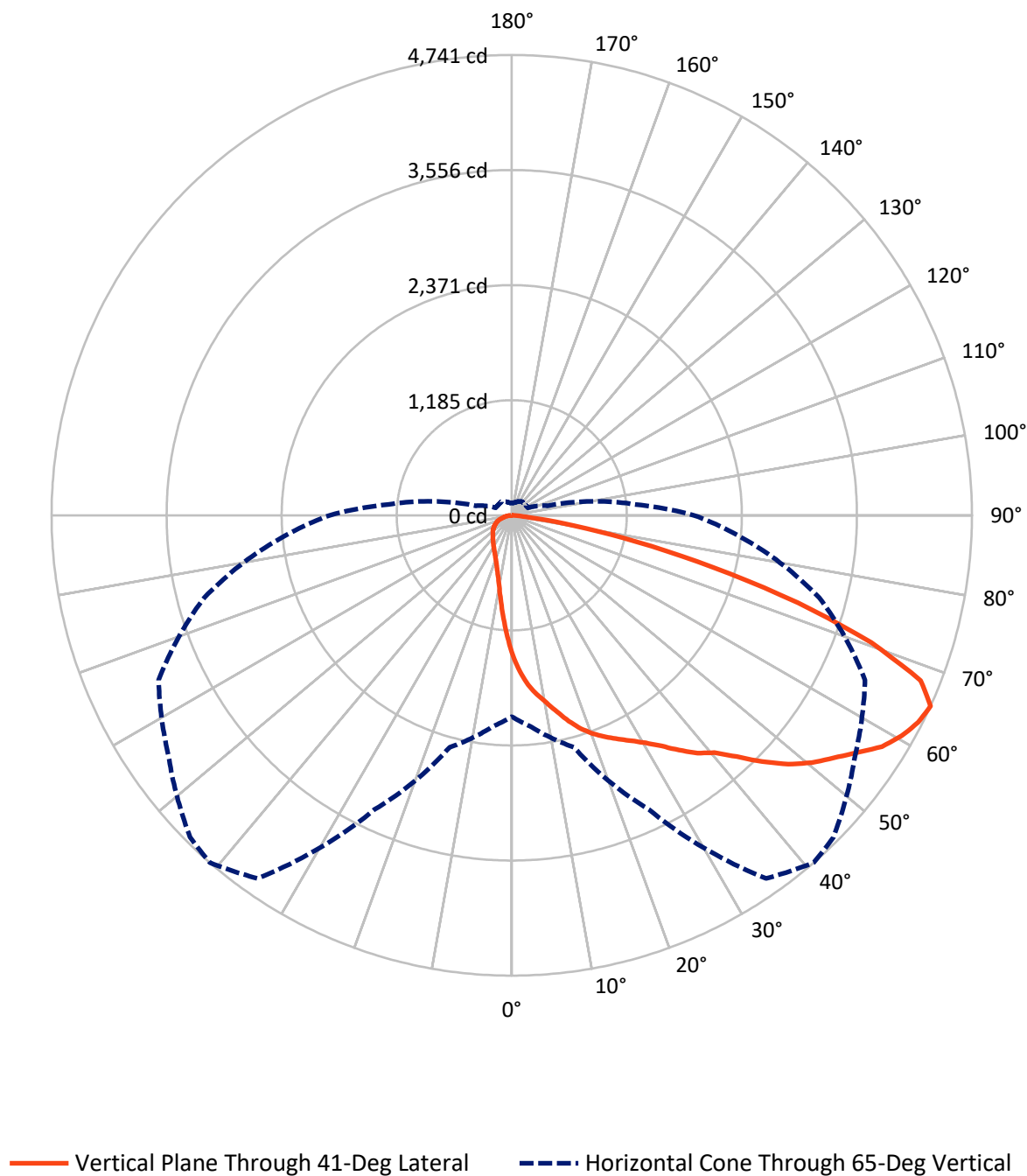
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 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	1089.2	0.0	1089.2
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	7394.8	0.0	7394.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	8484.0	0.0	8484.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.7	1.6
10°-20°	403.9	4.8
20°-30°	694.8	8.2
30°-40°	1053.8	12.4
40°-50°	1543.9	18.2
50°-60°	1949.6	23.0
60°-70°	1828.1	21.5
70°-80°	814.8	9.6
80°-90°	60.4	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°	8484.0	100.0
0°-180°	8484.0	100.0

Coefficient of Utilization



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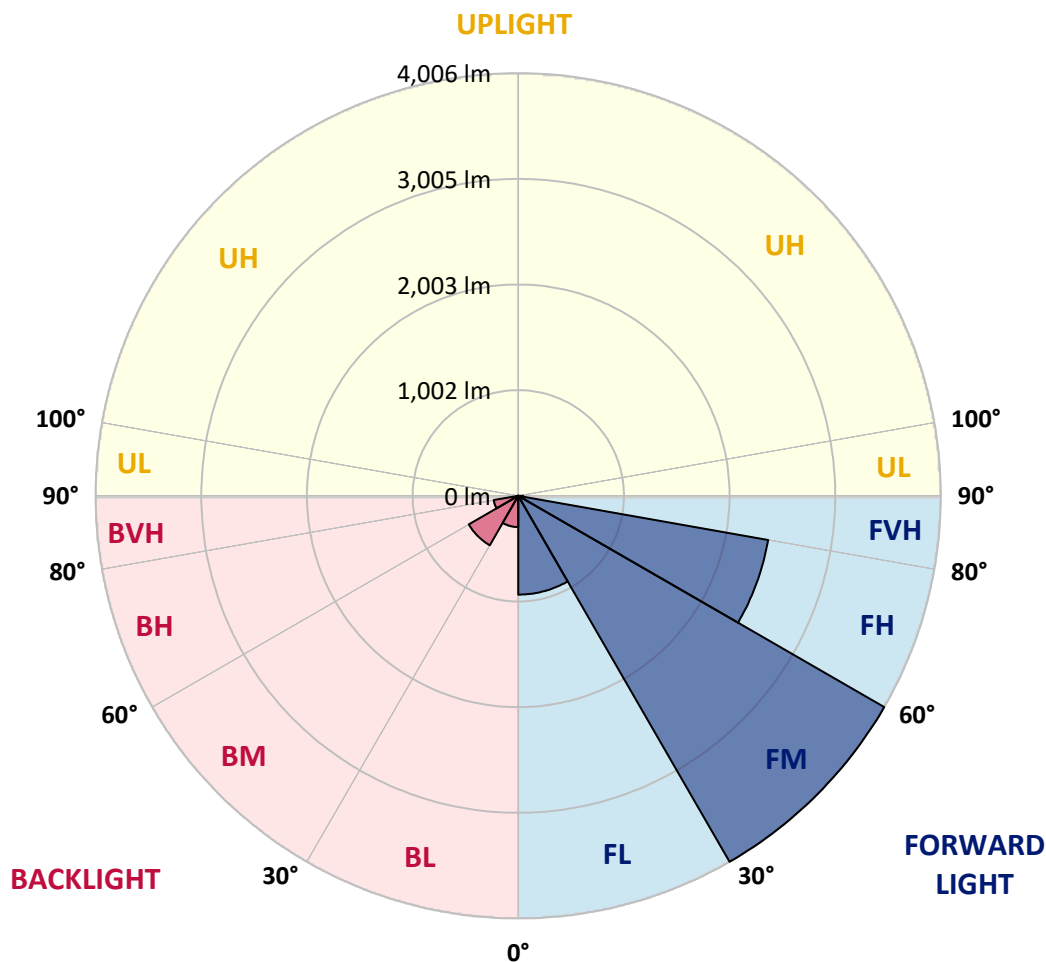
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	937.0	11.0			
FM	(30°-60°)	4006.5	47.2			
FH	(60°-80°)	2406.3	28.4			G2/5000
FVH	(80°-90°)	45.1	0.5			G1/100
BL	(0°-30°)	296.5	3.5	B1/500		
BM	(30°-60°)	540.9	6.4	B1/1000		
BH	(60°-80°)	236.6	2.8	B1/500		G1/500
BVH	(80°-90°)	15.3	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°	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6
2.5°	1667.5	1662.1	1658.5	1638.9	1638.9	1612.0	1613.8	1588.8	1558.3	1510.0	1458.2
5°	1824.9	1817.8	1808.8	1789.1	1782.0	1755.2	1751.6	1715.8	1663.9	1579.8	1486.8
7.5°	1962.7	1955.5	1943.0	1914.4	1894.7	1862.5	1853.6	1807.0	1749.8	1646.0	1515.4
10°	2087.9	2082.6	2066.5	2030.7	2003.8	1964.5	1948.4	1885.8	1814.2	1699.7	1538.7
12.5°	2215.0	2207.8	2186.3	2155.9	2123.7	2077.2	2057.5	1977.0	1885.8	1758.7	1572.7
15°	2333.0	2322.3	2306.2	2274.0	2245.4	2200.6	2179.2	2084.4	1973.4	1824.9	1617.4
17.5°	2410.0	2401.0	2386.7	2368.8	2345.6	2311.6	2290.1	2197.1	2061.1	1889.3	1663.9
20°	2456.5	2452.9	2447.6	2436.8	2426.1	2402.8	2386.7	2299.1	2155.9	1952.0	1708.6
22.5°	2492.3	2488.7	2486.9	2486.9	2488.7	2479.8	2469.0	2393.9	2247.2	2018.2	1749.8
25°	2547.7	2546.0	2542.4	2538.8	2551.3	2553.1	2549.5	2497.6	2361.7	2105.8	1801.7
27.5°	2624.7	2619.3	2612.2	2608.6	2621.1	2630.0	2637.2	2601.4	2483.3	2195.3	1860.7
30°	2742.8	2726.7	2708.8	2696.2	2705.2	2719.5	2735.6	2714.1	2608.6	2306.2	1921.5
32.5°	2882.3	2862.6	2821.5	2798.2	2821.5	2832.2	2844.7	2834.0	2739.2	2426.1	1982.4
35°	3052.3	3029.0	2986.1	2952.1	2993.2	2970.0	2964.6	2953.9	2862.6	2544.2	2050.4
37.5°	3335.0	3301.0	3233.0	3157.8	3157.8	3107.7	3088.1	3055.9	2973.6	2649.7	2116.6
40°	3662.4	3617.7	3530.0	3419.1	3317.1	3213.3	3200.8	3177.5	3104.2	2771.4	2191.7
42.5°	4022.0	3936.1	3814.5	3680.3	3515.7	3397.6	3369.0	3302.8	3231.2	2894.8	2266.8
45°	4421.0	4242.1	4064.9	3997.0	3725.0	3617.7	3564.0	3444.1	3363.6	3023.7	2345.6
47.5°	4485.4	4345.8	4227.7	4217.0	3920.0	3830.6	3769.7	3598.0	3506.7	3161.4	2427.9
50°	4449.6	4365.5	4378.0	4335.1	4063.1	4004.1	3957.6	3762.6	3648.1	3293.8	2503.0
52.5°	4299.3	4345.8	4417.4	4338.7	4199.1	4150.8	4127.6	3939.7	3780.5	3415.5	2571.0
55°	4120.4	4152.6	4306.5	4403.1	4356.6	4313.6	4292.2	4145.4	3911.1	3517.5	2633.6
57.5°	3859.2	3844.9	4014.8	4392.4	4521.2	4496.1	4472.9	4347.6	4032.7	3590.8	2673.0
60°	3467.4	3436.9	3651.6	4177.7	4574.8	4614.2	4603.5	4481.8	4125.8	3589.0	2656.9
62.5°	2789.3	2864.4	3161.4	3827.0	4598.1	4698.3	4678.6	4492.5	4156.2	3485.3	2554.9
65°	2073.6	2181.0	2472.6	3343.9	4565.9	4741.2	4687.6	4317.2	4014.8	3279.5	2331.3
67.5°	1493.9	1588.8	1801.7	2751.7	4256.4	4544.4	4481.8	4030.9	3689.2	2987.9	2021.7
70°	1021.6	1089.6	1234.5	2003.8	3633.8	3929.0	3889.6	3603.3	3175.7	2640.8	1642.4
72.5°	721.0	749.7	842.7	1322.2	2760.7	3082.7	3036.2	2964.6	2551.3	2195.3	1277.4
75°	540.3	558.2	608.3	855.2	1862.5	2136.2	2093.3	2134.5	1905.4	1662.1	930.4
77.5°	204.0	221.9	345.3	545.7	1102.1	1311.4	1268.5	1293.6	1059.2	839.1	463.4
80°	55.5	59.0	114.5	259.4	501.0	653.0	594.0	509.9	393.6	386.5	245.1
82.5°	23.3	26.8	51.9	139.6	178.9	178.9	150.3	186.1	150.3	180.7	118.1
85°	8.9	10.7	12.5	35.8	23.3	25.0	26.8	35.8	30.4	37.6	26.8
87.5°	0.0	0.0	0.0	1.8	1.8	3.6	1.8	3.6	5.4	5.4	5.4
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°	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6
2.5°	1436.7	1417.0	1388.4	1341.9	1293.6	1266.7	1232.7	1227.4	1191.6	1188.0	1173.7
5°	1445.6	1404.5	1331.1	1241.7	1154.0	1086.0	1035.9	1009.1	957.2	957.2	942.9
7.5°	1452.8	1388.4	1270.3	1137.9	1018.0	926.8	858.8	830.2	783.6	780.1	769.3
10°	1454.6	1368.7	1204.1	1032.3	885.6	792.6	726.4	694.2	653.0	649.5	642.3
12.5°	1468.9	1358.0	1145.1	941.1	790.8	690.6	626.2	599.4	567.2	563.6	556.4
15°	1492.1	1358.0	1095.0	864.2	706.7	613.7	558.2	533.2	509.9	506.3	502.7
17.5°	1515.4	1354.4	1044.9	792.6	636.9	552.8	504.5	484.9	467.0	465.2	461.6
20°	1536.9	1352.6	994.8	731.8	583.3	502.7	465.2	447.3	433.0	433.0	431.2
22.5°	1558.3	1349.0	946.5	674.5	536.7	465.2	433.0	413.3	402.6	402.6	400.8
25°	1590.5	1349.0	901.7	626.2	499.2	436.6	404.3	390.0	381.1	379.3	379.3
27.5°	1628.1	1359.8	862.4	583.3	467.0	407.9	382.9	368.6	357.8	354.3	356.0
30°	1669.3	1368.7	826.6	545.7	436.6	386.5	359.6	345.3	334.6	331.0	332.8
32.5°	1710.4	1379.4	794.4	511.7	406.1	366.8	339.9	323.8	313.1	311.3	311.3
35°	1755.2	1390.2	762.2	483.1	381.1	347.1	322.0	304.2	297.0	293.4	295.2
37.5°	1799.9	1408.1	731.8	456.2	363.2	329.2	305.9	288.1	282.7	280.9	280.9
40°	1853.6	1434.9	719.2	438.3	347.1	313.1	293.4	275.5	270.2	270.2	270.2
42.5°	1898.3	1456.4	708.5	418.7	334.6	298.8	280.9	266.6	263.0	261.2	263.0
45°	1943.0	1476.0	694.2	400.8	318.5	284.5	270.2	255.8	252.3	252.3	252.3
47.5°	1987.7	1486.8	674.5	382.9	304.2	272.0	259.4	246.9	243.3	243.3	243.3
50°	2023.5	1495.7	645.9	363.2	288.1	261.2	248.7	236.2	232.6	232.6	232.6
52.5°	2059.3	1497.5	615.5	339.9	272.0	248.7	238.0	225.4	221.9	220.1	220.1
55°	2091.5	1495.7	579.7	313.1	254.1	234.4	225.4	214.7	207.5	200.4	204.0
57.5°	2114.8	1493.9	538.5	286.3	236.2	220.1	216.5	202.2	187.9	170.0	173.5
60°	2105.8	1474.3	493.8	252.3	216.5	205.8	205.8	186.1	161.0	152.1	153.9
62.5°	2048.6	1418.8	447.3	216.5	196.8	191.4	189.6	168.2	148.5	139.6	141.3
65°	1876.8	1279.2	379.3	184.3	177.1	175.3	175.3	155.7	137.8	127.0	128.8
67.5°	1615.6	1073.5	309.5	155.7	157.4	161.0	161.0	143.1	125.2	114.5	116.3
70°	1295.3	839.1	246.9	134.2	136.0	141.3	144.9	128.8	112.7	102.0	102.0
72.5°	975.1	636.9	198.6	112.7	121.7	121.7	127.0	114.5	98.4	87.7	89.5
75°	706.7	456.2	157.4	94.8	105.6	103.8	103.8	96.6	84.1	76.9	76.9
77.5°	334.6	239.7	125.2	68.0	82.3	80.5	82.3	76.9	71.6	64.4	66.2
80°	164.6	118.1	80.5	48.3	57.3	59.0	64.4	60.8	59.0	53.7	53.7
82.5°	78.7	46.5	37.6	34.0	39.4	41.2	44.7	44.7	46.5	42.9	42.9
85°	21.5	12.5	16.1	21.5	25.0	26.8	30.4	32.2	32.2	30.4	32.2
87.5°	5.4	5.4	7.2	10.7	12.5	14.3	16.1	16.1	7.2	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)