

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: P840942

Luminaire Tested: **ARCH4-110-727-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840942
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-110-727-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 920mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12481 lumens
Efficiency: N/A
Efficacy: 110.8 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

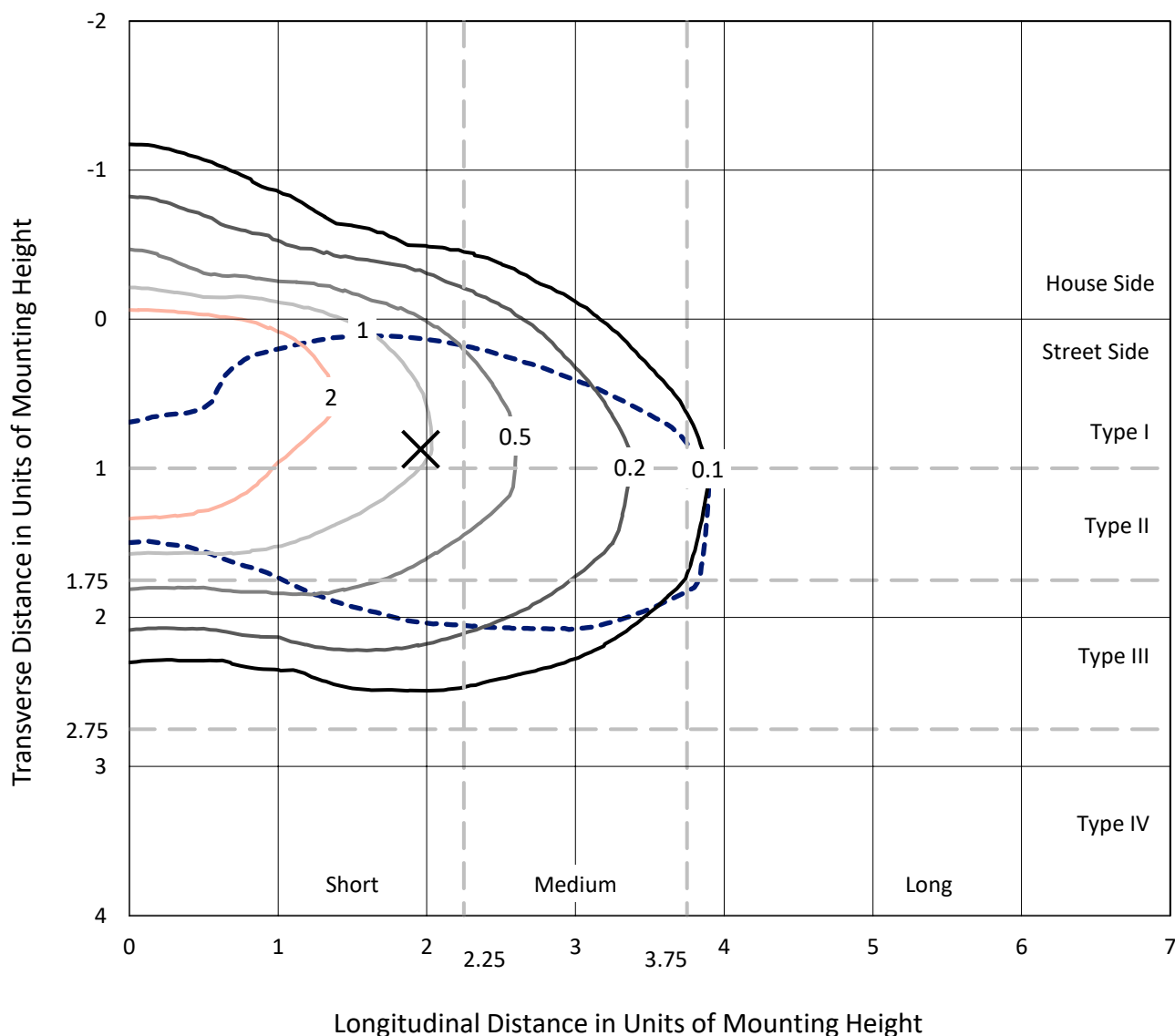
Input Watts (W): 112.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

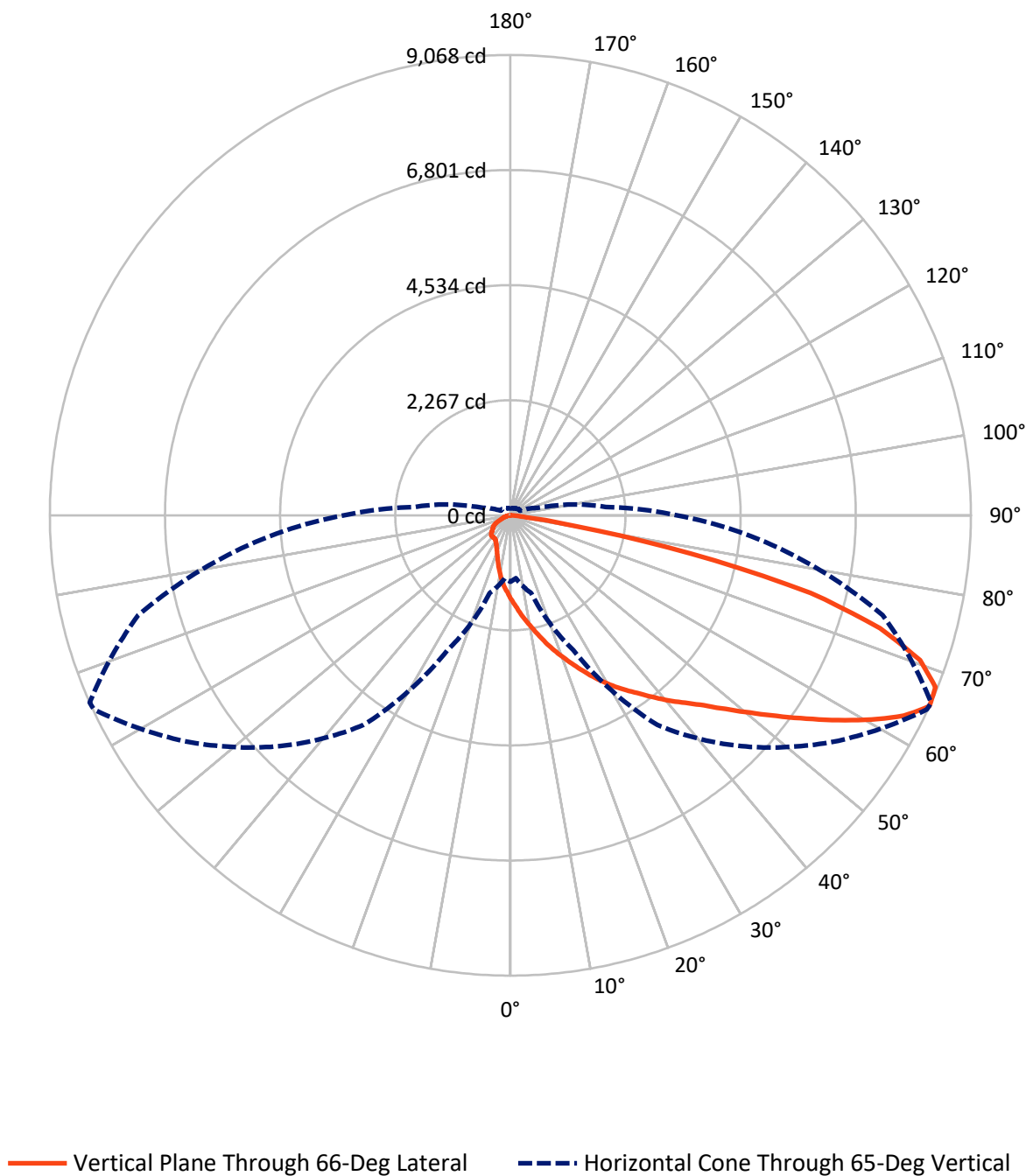
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 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	1320.2	0.0	1320.2
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	11160.9	0.0	11160.9
	% Fixture	89.4	0.0	89.4
Total	Lumens	12481.0	0.0	12481.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.0	1.3
10°-20°	531.4	4.3
20°-30°	961.4	7.7
30°-40°	1503.4	12.0
40°-50°	2280.6	18.3
50°-60°	2897.6	23.2
60°-70°	2707.5	21.7
70°-80°	1345.6	10.8
80°-90°	90.4	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°	12481.0	100.0
0°-180°	12481.0	100.0

Coefficient of Utilization



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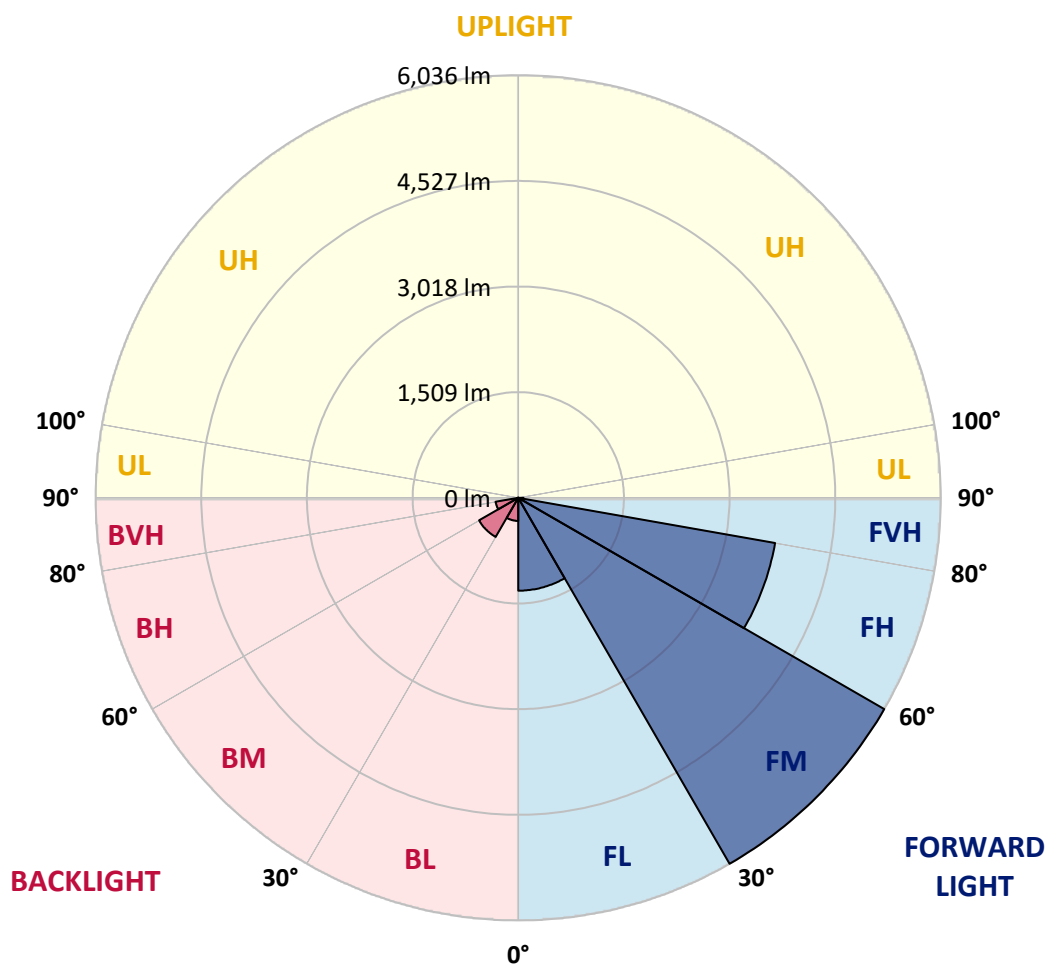
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1326.1	10.6			
FM	(30°-60°)	6036.0	48.4			
FH	(60°-80°)	3724.4	29.8			G2/5000
FVH	(80°-90°)	74.4	0.6			G1/100
BL	(0°-30°)	329.7	2.6	B1/500		
BM	(30°-60°)	645.7	5.2	B1/1000		
BH	(60°-80°)	328.8	2.6	B1/500		G1/500
BVH	(80°-90°)	16.0	0.1			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°	45°	55°	65°	66°	75°	85°
0°	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8
2.5°	1929.3	1945.0	1952.8	1955.4	1895.2	1869.1	1842.9	1782.7	1769.6	1735.6	1691.1
5°	2269.6	2290.5	2285.3	2274.8	2201.5	2117.7	2049.7	1937.1	1918.8	1837.7	1738.2
7.5°	2604.6	2623.0	2617.7	2578.5	2497.3	2379.5	2267.0	2102.0	2075.9	1945.0	1785.3
10°	2884.7	2900.5	2897.8	2858.6	2761.7	2617.7	2481.6	2261.7	2230.3	2044.5	1824.6
12.5°	3115.1	3136.0	3133.4	3107.3	3020.9	2863.8	2709.4	2445.0	2405.7	2164.9	1879.5
15°	3295.7	3321.9	3321.9	3311.4	3251.2	3120.3	2945.0	2646.5	2599.4	2303.6	1947.6
17.5°	3405.7	3426.6	3444.9	3463.3	3421.4	3321.9	3162.2	2848.1	2798.4	2439.7	2018.3
20°	3463.3	3484.2	3497.3	3536.6	3544.4	3494.7	3369.0	3047.0	2994.7	2594.2	2099.4
22.5°	3557.5	3575.8	3578.4	3612.5	3628.2	3641.3	3562.7	3243.4	3201.5	2764.3	2191.0
25°	3714.6	3735.5	3727.7	3743.4	3746.0	3761.7	3753.8	3468.5	3426.6	2958.0	2301.0
27.5°	3916.1	3942.3	3937.1	3921.4	3897.8	3884.7	3918.8	3696.2	3657.0	3151.8	2413.6
30°	4133.4	4164.8	4157.0	4125.6	4062.7	4007.8	4054.9	3910.9	3874.3	3350.7	2539.2
32.5°	4353.3	4389.9	4387.3	4335.0	4227.6	4133.4	4204.1	4112.5	4086.3	3565.4	2675.3
35°	4497.3	4544.4	4539.2	4507.7	4369.0	4287.9	4374.2	4319.3	4300.9	3827.1	2871.7
37.5°	4730.3	4780.0	4735.5	4657.0	4497.3	4455.4	4560.1	4552.2	4539.2	4104.6	3078.5
40°	5295.7	5369.0	5251.2	4929.2	4667.4	4630.8	4780.0	4811.4	4798.3	4379.5	3264.3
42.5°	5887.3	5997.2	5814.0	5369.0	4976.3	4842.8	5020.8	5065.3	5049.6	4615.1	3431.9
45°	6245.9	6293.0	6109.8	5764.3	5523.4	5099.4	5277.4	5350.7	5337.6	4897.8	3646.5
47.5°	6539.1	6520.8	6311.4	6078.4	6122.9	5460.6	5567.9	5711.9	5701.4	5209.3	3882.1
50°	6601.9	6560.0	6476.3	6329.7	6447.5	5827.1	5874.2	6122.9	6112.4	5554.8	4120.3
52.5°	6159.5	6104.6	6332.3	6455.3	6416.1	6094.1	6211.9	6573.1	6567.9	5929.2	4348.1
55°	5054.8	5010.3	5622.9	6259.0	6382.0	6282.6	6586.2	7041.7	7070.5	6327.1	4554.9
57.5°	3976.3	3929.2	4531.3	5766.9	6256.4	6455.3	7023.4	7578.3	7615.0	6759.0	4751.2
60°	3170.1	3099.4	3560.1	4992.0	6020.8	6588.8	7444.8	8167.3	8172.6	7154.3	4871.6
62.5°	2154.4	2075.9	2586.3	4010.4	5625.5	6609.8	7769.4	8675.2	8696.1	7450.1	4892.5
65°	1308.9	1243.4	1589.0	2929.2	5041.8	6431.8	7774.7	9049.5	9067.8	7586.2	4766.9
67.5°	759.1	733.0	908.4	1824.6	4073.2	5952.7	7447.5	8991.9	9026.0	7528.6	4481.6
70°	442.4	439.8	505.2	903.1	2874.3	5002.5	6717.1	8507.6	8557.4	7227.6	4044.4
72.5°	324.6	329.8	356.0	484.3	1664.9	3602.0	5688.3	7533.8	7609.8	6638.6	3421.4
75°	256.5	259.2	282.7	329.8	874.3	2036.6	4261.7	6047.0	6107.2	5588.9	2672.7
77.5°	191.1	196.3	214.7	233.0	405.7	934.5	2397.8	3725.0	3625.6	3068.0	1290.5
80°	138.7	151.8	159.7	167.5	214.7	361.2	719.9	1298.4	1287.9	1340.3	609.9
82.5°	89.0	99.5	107.3	112.6	128.3	172.8	214.7	290.6	314.1	520.9	243.4
85°	39.3	44.5	49.7	60.2	55.0	60.2	89.0	57.6	49.7	78.5	44.5
87.5°	0.0	0.0	7.9	13.1	10.5	5.2	15.7	10.5	7.9	7.9	7.9
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°	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8
2.5°	1667.5	1638.7	1578.5	1520.9	1486.9	1442.4	1403.1	1366.5	1363.8	1353.4	1335.0
5°	1688.4	1633.5	1520.9	1413.6	1332.4	1246.0	1172.7	1115.2	1094.2	1078.5	1057.6
7.5°	1709.4	1623.0	1455.5	1298.4	1170.1	1049.7	963.3	884.8	861.2	840.3	827.2
10°	1717.2	1604.7	1379.5	1170.1	1002.6	874.3	782.7	725.1	704.2	693.7	685.8
12.5°	1740.8	1594.2	1308.9	1049.7	856.0	738.2	672.8	638.7	630.9	623.0	615.2
15°	1772.2	1594.2	1238.2	931.9	740.8	646.6	607.3	583.8	578.5	575.9	570.7
17.5°	1806.2	1594.2	1170.1	832.4	657.1	586.4	557.6	544.5	541.9	539.3	536.6
20°	1853.4	1596.8	1096.8	746.1	596.8	541.9	518.3	502.6	500.0	497.4	497.4
22.5°	1900.5	1602.1	1026.2	680.6	557.6	507.8	479.0	463.3	458.1	458.1	458.1
25°	1960.7	1617.8	960.7	625.6	523.5	476.4	439.8	426.7	424.1	424.1	421.5
27.5°	2031.4	1636.1	903.1	583.8	489.5	439.8	403.1	390.0	384.8	384.8	382.2
30°	2107.3	1654.4	856.0	552.3	455.5	403.1	369.1	353.4	348.2	350.8	348.2
32.5°	2191.0	1680.6	819.4	531.4	424.1	371.7	340.3	322.0	319.4	319.4	316.7
35°	2332.4	1753.9	814.1	520.9	397.9	348.2	316.7	298.4	295.8	295.8	293.2
37.5°	2484.2	1837.7	837.7	515.7	377.0	327.2	298.4	280.1	277.5	277.5	277.5
40°	2612.5	1900.5	863.9	515.7	363.9	308.9	282.7	267.0	267.0	267.0	267.0
42.5°	2698.9	1905.7	858.6	515.7	353.4	295.8	272.2	256.5	256.5	259.2	256.5
45°	2827.2	1931.9	837.7	507.8	345.5	285.3	261.8	248.7	246.1	248.7	248.7
47.5°	2979.0	1979.0	816.7	476.4	342.9	274.9	253.9	238.2	235.6	238.2	235.6
50°	3123.0	2020.9	806.3	434.5	337.7	264.4	243.4	227.7	225.1	227.7	225.1
52.5°	3243.4	2039.2	787.9	405.7	324.6	253.9	233.0	217.3	212.0	214.7	214.7
55°	3340.2	2034.0	761.8	382.2	301.0	243.4	219.9	206.8	198.9	198.9	196.3
57.5°	3429.2	2036.6	738.2	358.6	274.9	227.7	209.4	193.7	183.2	180.6	178.0
60°	3463.3	2023.5	696.3	327.2	248.7	214.7	196.3	178.0	167.5	164.9	162.3
62.5°	3416.1	1976.4	641.3	272.2	225.1	198.9	183.2	164.9	154.4	151.8	149.2
65°	3282.6	1887.4	557.6	214.7	204.2	180.6	167.5	154.4	141.4	136.1	133.5
67.5°	3054.9	1759.1	452.9	172.8	180.6	164.9	157.1	141.4	125.7	120.4	117.8
70°	2730.3	1589.0	340.3	146.6	159.7	146.6	141.4	125.7	112.6	107.3	104.7
72.5°	2274.8	1314.1	238.2	125.7	138.7	128.3	123.0	112.6	99.5	91.6	91.6
75°	1719.9	942.4	157.1	107.3	115.2	109.9	102.1	94.2	86.4	81.1	78.5
77.5°	740.8	366.5	96.9	81.1	94.2	91.6	81.1	75.9	73.3	68.1	68.1
80°	319.4	149.2	60.2	60.2	68.1	65.4	62.8	57.6	57.6	55.0	52.4
82.5°	117.8	60.2	36.6	44.5	49.7	44.5	44.5	44.5	44.5	41.9	41.9
85°	28.8	18.3	18.3	26.2	28.8	26.2	28.8	26.2	26.2	26.2	23.6
87.5°	7.9	7.9	10.5	10.5	10.5	10.5	10.5	7.9	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)