

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: P836753

Luminaire Tested: **ARCH3-70-727-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836753
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: ARCH3-70-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 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: 7797 lumens
Efficiency: N/A
Efficacy: 106.7 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

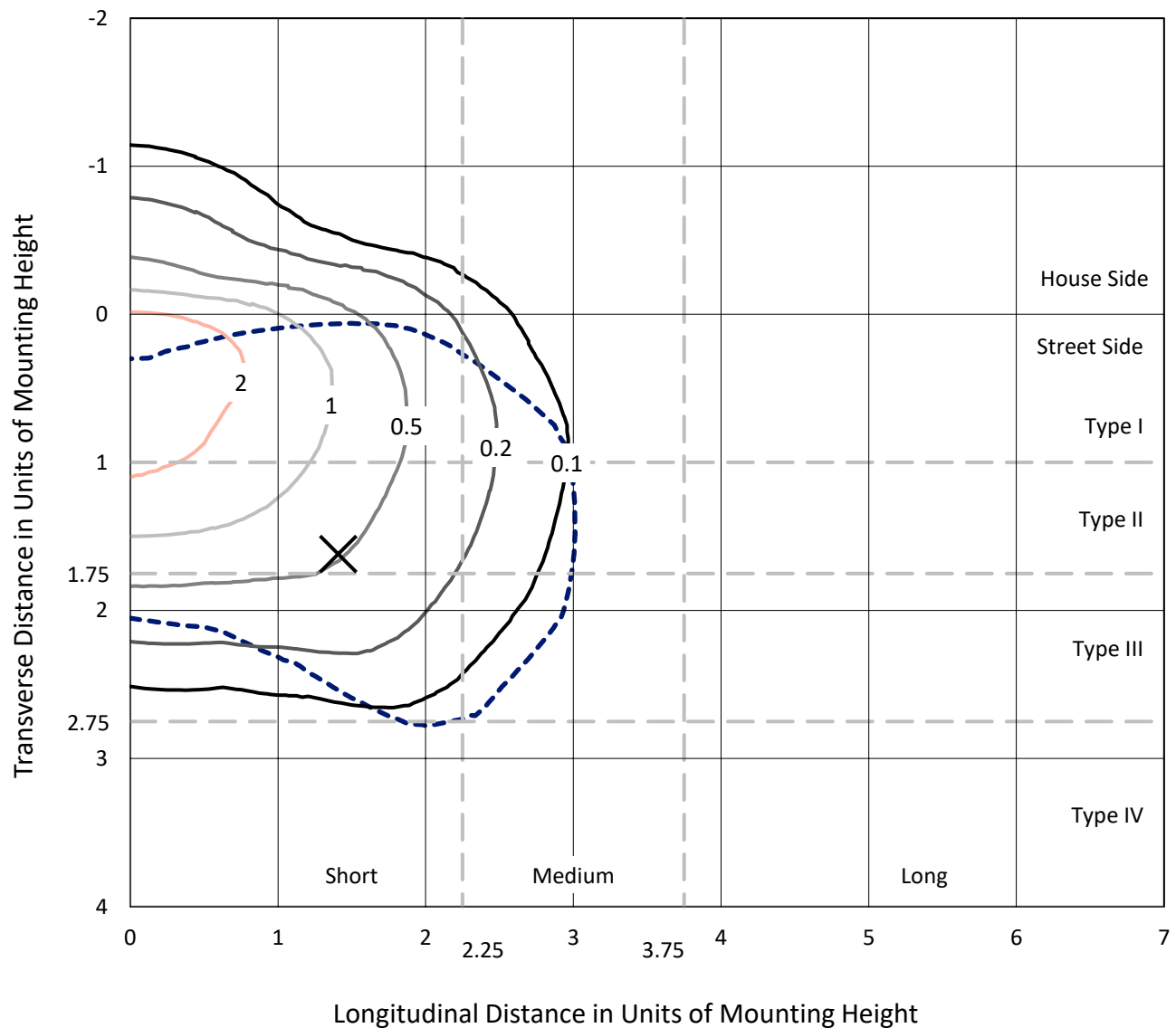


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Iso-Footcandle Lines of Horizontal Illumination

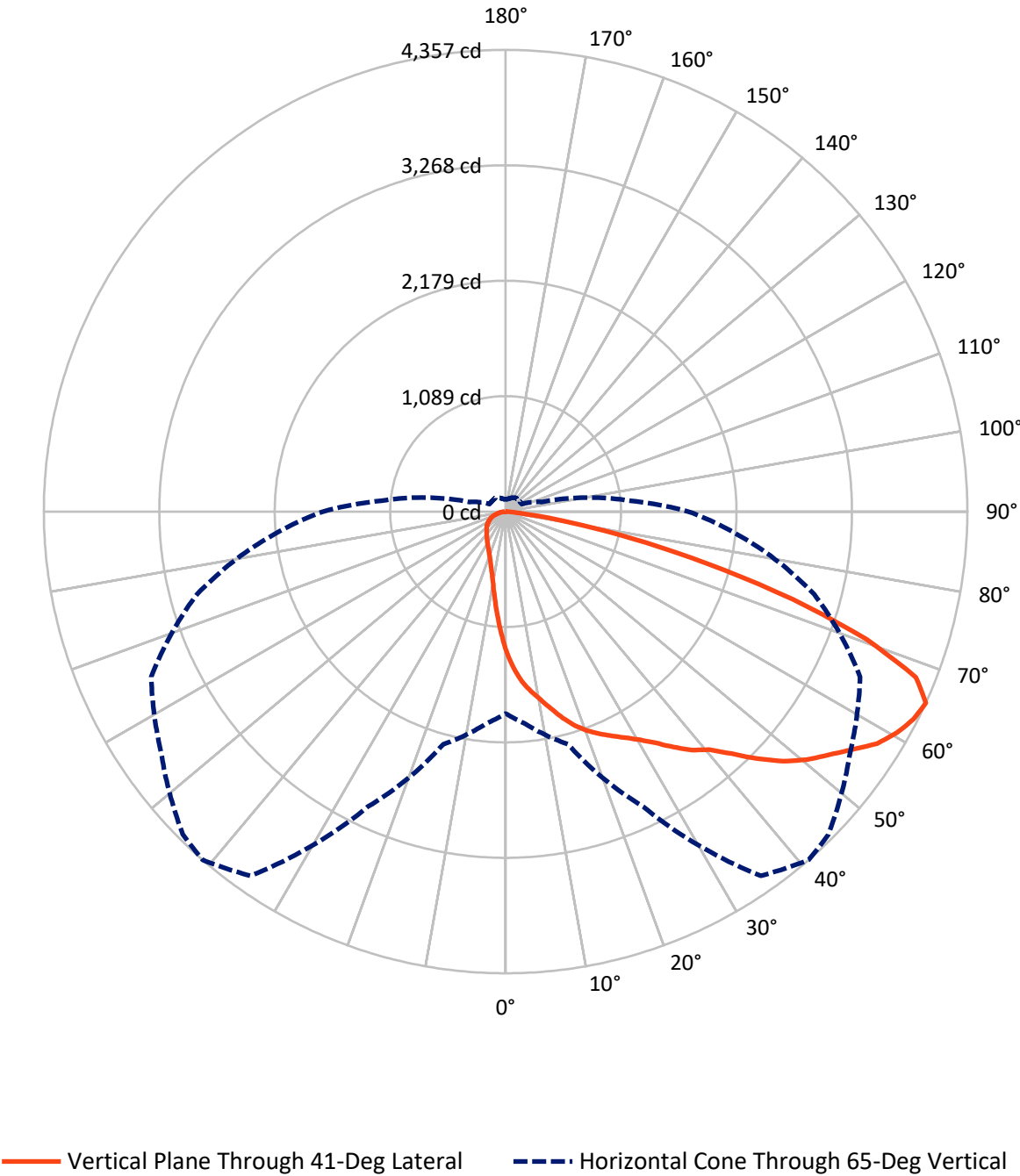
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 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	1001.0	0.0	1001.0
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	6796.0	0.0	6796.0
	% Fixture	87.2	0.0	87.2
Total	Lumens	7797.0	0.0	7797.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.8	1.6
10°-20°	371.2	4.8
20°-30°	638.6	8.2
30°-40°	968.5	12.4
40°-50°	1418.9	18.2
50°-60°	1791.7	23.0
60°-70°	1680.1	21.5
70°-80°	748.8	9.6
80°-90°	55.5	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°	7797.0	100.0
0°-180°	7797.0	100.0

Coefficient of Utilization



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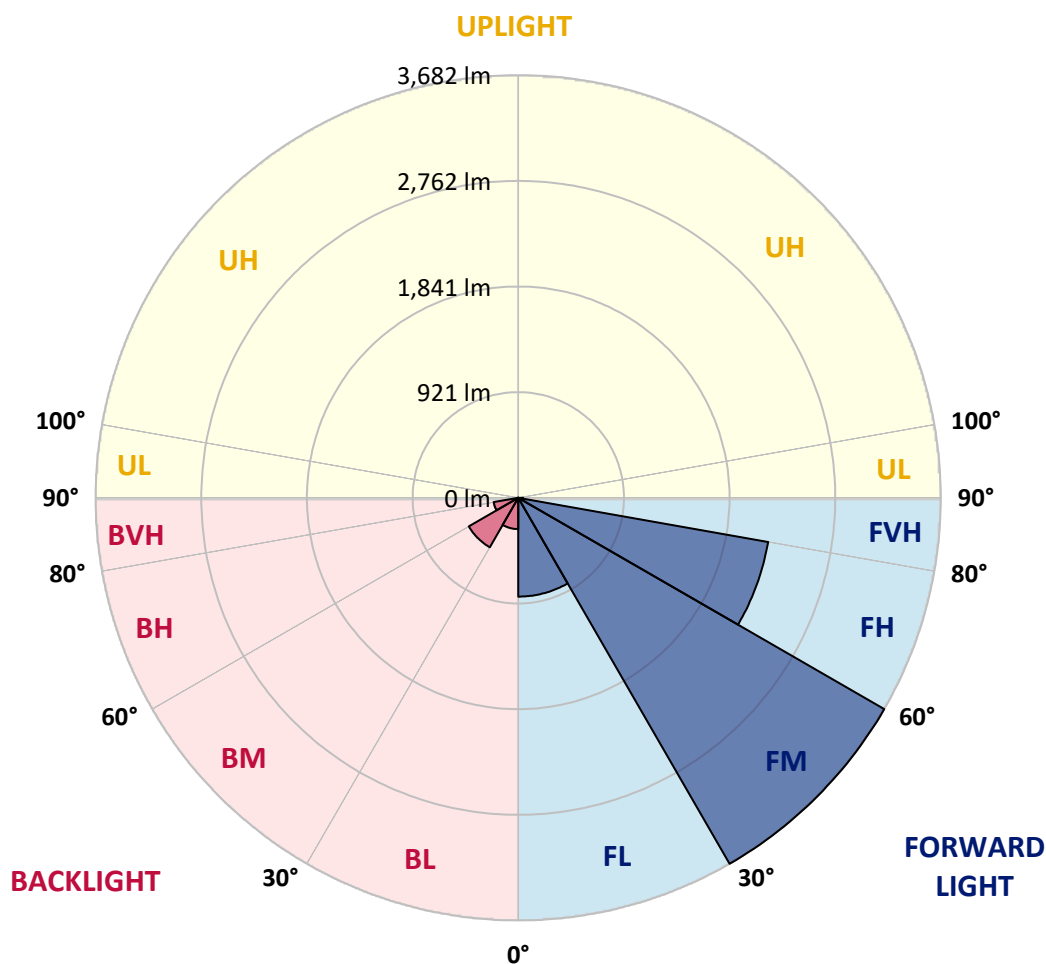
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	861.1	11.0			
FM	(30°-60°)	3682.0	47.2			
FH	(60°-80°)	2211.4	28.4			G2/5000
FVH	(80°-90°)	41.4	0.5			G1/100
BL	(0°-30°)	272.5	3.5	B1/500		
BM	(30°-60°)	497.1	6.4	B1/1000		
BH	(60°-80°)	217.5	2.8	B1/500		G1/500
BVH	(80°-90°)	14.0	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°	1328.6	1328.6	1328.6	1328.6	1328.6	1328.6	1328.6	1328.6	1328.6	1328.6	1328.6
2.5°	1532.5	1527.5	1524.2	1506.1	1506.1	1481.5	1483.1	1460.1	1432.2	1387.8	1340.1
5°	1677.2	1670.6	1662.4	1644.3	1637.7	1613.0	1609.7	1576.9	1529.2	1451.9	1366.4
7.5°	1803.8	1797.2	1785.7	1759.4	1741.3	1711.7	1703.5	1660.7	1608.1	1512.7	1392.7
10°	1918.9	1913.9	1899.1	1866.2	1841.6	1805.4	1790.6	1733.1	1667.3	1562.1	1414.1
12.5°	2035.6	2029.0	2009.3	1981.3	1951.7	1909.0	1890.9	1816.9	1733.1	1616.3	1445.3
15°	2144.1	2134.3	2119.5	2089.9	2063.6	2022.4	2002.7	1915.6	1813.6	1677.2	1486.4
17.5°	2214.8	2206.6	2193.5	2177.0	2155.6	2124.4	2104.7	2019.2	1894.2	1736.3	1529.2
20°	2257.6	2254.3	2249.4	2239.5	2229.6	2208.3	2193.5	2112.9	1981.3	1793.9	1570.3
22.5°	2290.5	2287.2	2285.5	2285.5	2287.2	2279.0	2269.1	2200.0	2065.2	1854.7	1608.1
25°	2341.4	2339.8	2336.5	2333.2	2344.7	2346.4	2343.1	2295.4	2170.4	1935.3	1655.8
27.5°	2412.1	2407.2	2400.6	2397.3	2408.9	2417.1	2423.7	2390.8	2282.2	2017.5	1710.0
30°	2520.7	2505.9	2489.4	2477.9	2486.1	2499.3	2514.1	2494.4	2397.3	2119.5	1765.9
32.5°	2648.9	2630.8	2593.0	2571.6	2593.0	2602.9	2614.4	2604.5	2517.4	2229.6	1821.8
35°	2805.1	2783.7	2744.3	2713.0	2750.9	2729.5	2724.6	2714.7	2630.8	2338.1	1884.3
37.5°	3064.9	3033.7	2971.2	2902.1	2902.1	2856.1	2838.0	2808.4	2732.8	2435.2	1945.2
40°	3365.8	3324.7	3244.1	3142.2	3048.5	2953.1	2941.6	2920.2	2852.8	2547.0	2014.2
42.5°	3696.3	3617.4	3505.6	3382.3	3231.0	3122.5	3096.2	3035.3	2969.5	2660.4	2083.3
45°	4063.0	3898.6	3735.8	3673.3	3423.4	3324.7	3275.4	3165.2	3091.2	2778.8	2155.6
47.5°	4122.2	3993.9	3885.4	3875.5	3602.6	3520.4	3464.5	3306.6	3222.8	2905.4	2231.3
50°	4089.3	4012.0	4023.5	3984.1	3734.1	3679.9	3637.1	3457.9	3352.7	3027.1	2300.3
52.5°	3951.2	3993.9	4059.7	3987.3	3859.1	3814.7	3793.3	3620.7	3474.3	3138.9	2362.8
55°	3786.7	3816.3	3957.8	4046.5	4003.8	3964.3	3944.6	3809.8	3594.4	3232.6	2420.4
57.5°	3546.7	3533.5	3689.7	4036.7	4155.1	4132.0	4110.7	3995.6	3706.2	3300.0	2456.5
60°	3186.6	3158.6	3355.9	3839.4	4204.4	4240.6	4230.7	4118.9	3791.7	3298.4	2441.7
62.5°	2563.4	2632.5	2905.4	3517.1	4225.8	4317.8	4299.8	4128.8	3819.6	3203.0	2348.0
65°	1905.7	2004.4	2272.4	3073.1	4196.2	4357.3	4308.0	3967.6	3689.7	3013.9	2142.5
67.5°	1373.0	1460.1	1655.8	2528.9	3911.7	4176.4	4118.9	3704.5	3390.5	2745.9	1858.0
70°	938.9	1001.4	1134.5	1841.6	3339.5	3610.8	3574.6	3311.6	2918.6	2426.9	1509.4
72.5°	662.6	688.9	774.4	1215.1	2537.1	2833.1	2790.3	2724.6	2344.7	2017.5	1174.0
75°	496.6	513.0	559.1	786.0	1711.7	1963.3	1923.8	1961.6	1751.1	1527.5	855.0
77.5°	187.4	203.9	317.3	501.5	1012.9	1205.2	1165.8	1188.8	973.4	771.2	425.9
80°	51.0	54.3	105.2	238.4	460.4	600.2	545.9	468.6	361.7	355.2	225.3
82.5°	21.4	24.7	47.7	128.3	164.4	164.4	138.1	171.0	138.1	166.1	108.5
85°	8.2	9.9	11.5	32.9	21.4	23.0	24.7	32.9	28.0	34.5	24.7
87.5°	0.0	0.0	0.0	1.6	1.6	3.3	1.6	3.3	4.9	4.9	4.9
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°	1328.6	1328.6	1328.6	1328.6	1328.6	1328.6	1328.6	1328.6	1328.6	1328.6	1328.6
2.5°	1320.3	1302.3	1276.0	1233.2	1188.8	1164.1	1132.9	1128.0	1095.1	1091.8	1078.6
5°	1328.6	1290.7	1223.3	1141.1	1060.6	998.1	952.0	927.4	879.7	879.7	866.5
7.5°	1335.1	1276.0	1167.4	1045.8	935.6	851.7	789.2	762.9	720.2	716.9	707.0
10°	1336.8	1257.9	1106.6	948.7	813.9	728.4	667.6	638.0	600.2	596.9	590.3
12.5°	1349.9	1248.0	1052.3	864.9	726.8	634.7	575.5	550.8	521.2	517.9	511.4
15°	1371.3	1248.0	1006.3	794.2	649.5	564.0	513.0	490.0	468.6	465.3	462.0
17.5°	1392.7	1244.7	960.3	728.4	585.4	508.1	463.7	445.6	429.2	427.5	424.2
20°	1412.4	1243.1	914.2	672.5	536.0	462.0	427.5	411.1	397.9	397.9	396.3
22.5°	1432.2	1239.8	869.8	619.9	493.3	427.5	397.9	379.8	370.0	370.0	368.3
25°	1461.8	1239.8	828.7	575.5	458.8	401.2	371.6	358.5	350.2	348.6	348.6
27.5°	1496.3	1249.6	792.5	536.0	429.2	374.9	351.9	338.7	328.9	325.6	327.2
30°	1534.1	1257.9	759.7	501.5	401.2	355.2	330.5	317.3	307.5	304.2	305.8
32.5°	1571.9	1267.7	730.1	470.3	373.2	337.1	312.4	297.6	287.7	286.1	286.1
35°	1613.0	1277.6	700.5	444.0	350.2	319.0	296.0	279.5	272.9	269.7	271.3
37.5°	1654.1	1294.0	672.5	419.3	333.8	302.5	281.2	264.7	259.8	258.1	258.1
40°	1703.5	1318.7	661.0	402.8	319.0	287.7	269.7	253.2	248.3	248.3	248.3
42.5°	1744.6	1338.4	651.1	384.8	307.5	274.6	258.1	245.0	241.7	240.1	241.7
45°	1785.7	1356.5	638.0	368.3	292.7	261.4	248.3	235.1	231.8	231.8	231.8
47.5°	1826.8	1366.4	619.9	351.9	279.5	249.9	238.4	226.9	223.6	223.6	223.6
50°	1859.7	1374.6	593.6	333.8	264.7	240.1	228.6	217.0	213.8	213.8	213.8
52.5°	1892.6	1376.3	565.6	312.4	249.9	228.6	218.7	207.2	203.9	202.2	202.2
55°	1922.1	1374.6	532.7	287.7	233.5	215.4	207.2	197.3	190.7	184.2	187.4
57.5°	1943.5	1373.0	494.9	263.1	217.0	202.2	199.0	185.8	172.6	156.2	159.5
60°	1935.3	1354.9	453.8	231.8	199.0	189.1	189.1	171.0	148.0	139.8	141.4
62.5°	1882.7	1303.9	411.1	199.0	180.9	175.9	174.3	154.6	136.5	128.3	129.9
65°	1724.8	1175.7	348.6	169.4	162.8	161.1	161.1	143.1	126.6	116.7	118.4
67.5°	1484.8	986.6	284.5	143.1	144.7	148.0	148.0	131.5	115.1	105.2	106.9
70°	1190.4	771.2	226.9	123.3	125.0	129.9	133.2	118.4	103.6	93.7	93.7
72.5°	896.1	585.4	182.5	103.6	111.8	111.8	116.7	105.2	90.4	80.6	82.2
75°	649.5	419.3	144.7	87.1	97.0	95.4	95.4	88.8	77.3	70.7	70.7
77.5°	307.5	220.3	115.1	62.5	75.6	74.0	75.6	70.7	65.8	59.2	60.8
80°	151.3	108.5	74.0	44.4	52.6	54.3	59.2	55.9	54.3	49.3	49.3
82.5°	72.3	42.8	34.5	31.2	36.2	37.8	41.1	41.1	42.8	39.5	39.5
85°	19.7	11.5	14.8	19.7	23.0	24.7	28.0	29.6	29.6	28.0	29.6
87.5°	4.9	4.9	6.6	9.9	11.5	13.2	14.8	14.8	6.6	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)