

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: P836270

Luminaire Tested: **ARCH3-160-740-U-T2R-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836270
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-160-740-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1245mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16455 lumens
Efficiency: N/A
Efficacy: 102.2 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

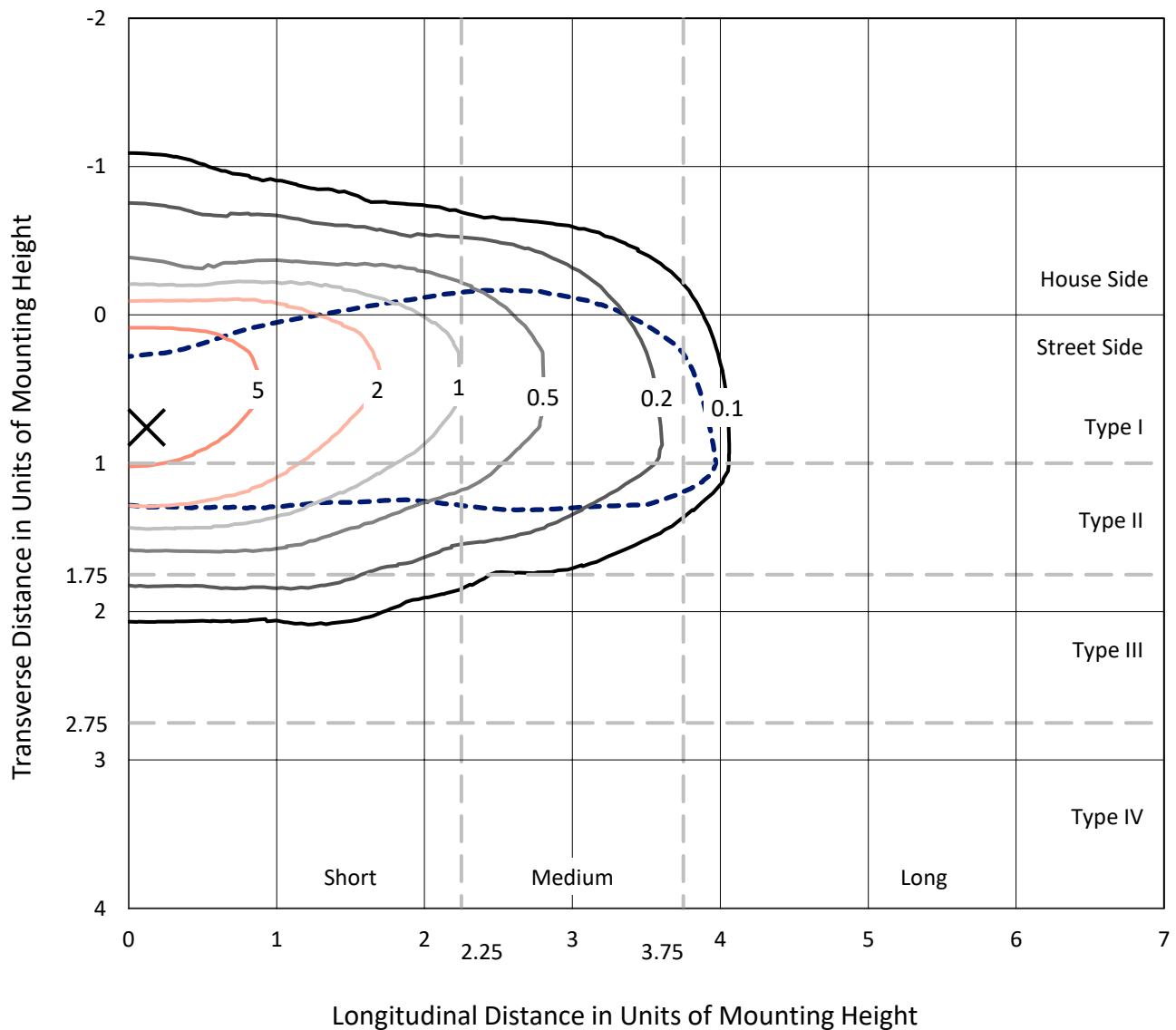
Input Watts (W): 161
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

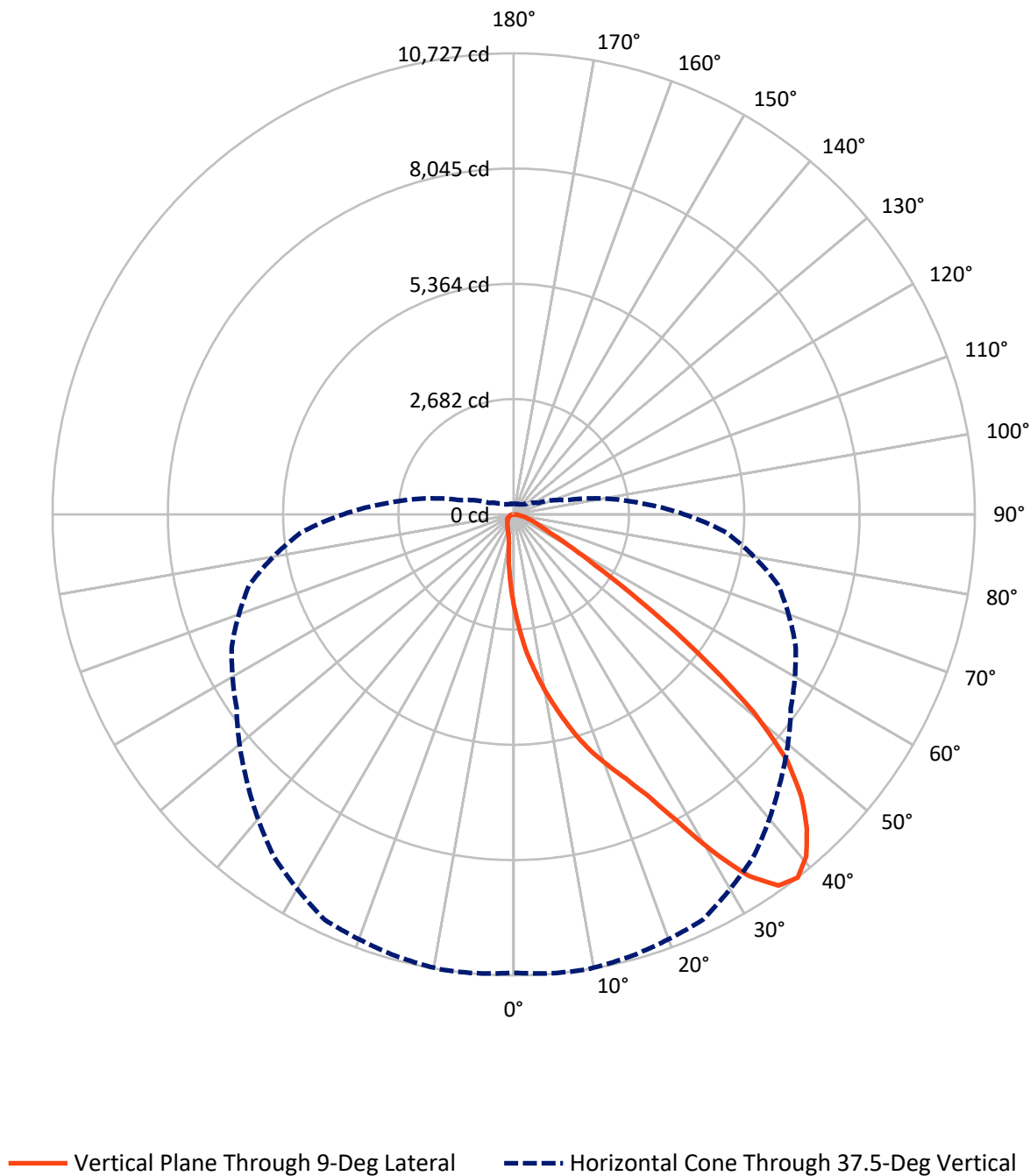
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.6 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2001.2	0.0	2001.2
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	14453.8	0.0	14453.8
	% Fixture	87.8	0.0	87.8
Total	Lumens	16455.0	0.0	16455.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.6	1.3
10°-20°	759.9	4.6
20°-30°	1561.4	9.5
30°-40°	2760.0	16.8
40°-50°	3666.4	22.3
50°-60°	3477.3	21.1
60°-70°	2652.9	16.1
70°-80°	1286.1	7.8
80°-90°	72.4	0.4
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°	16455.0	100.0
0°-180°	16455.0	100.0

Coefficient of Utilization



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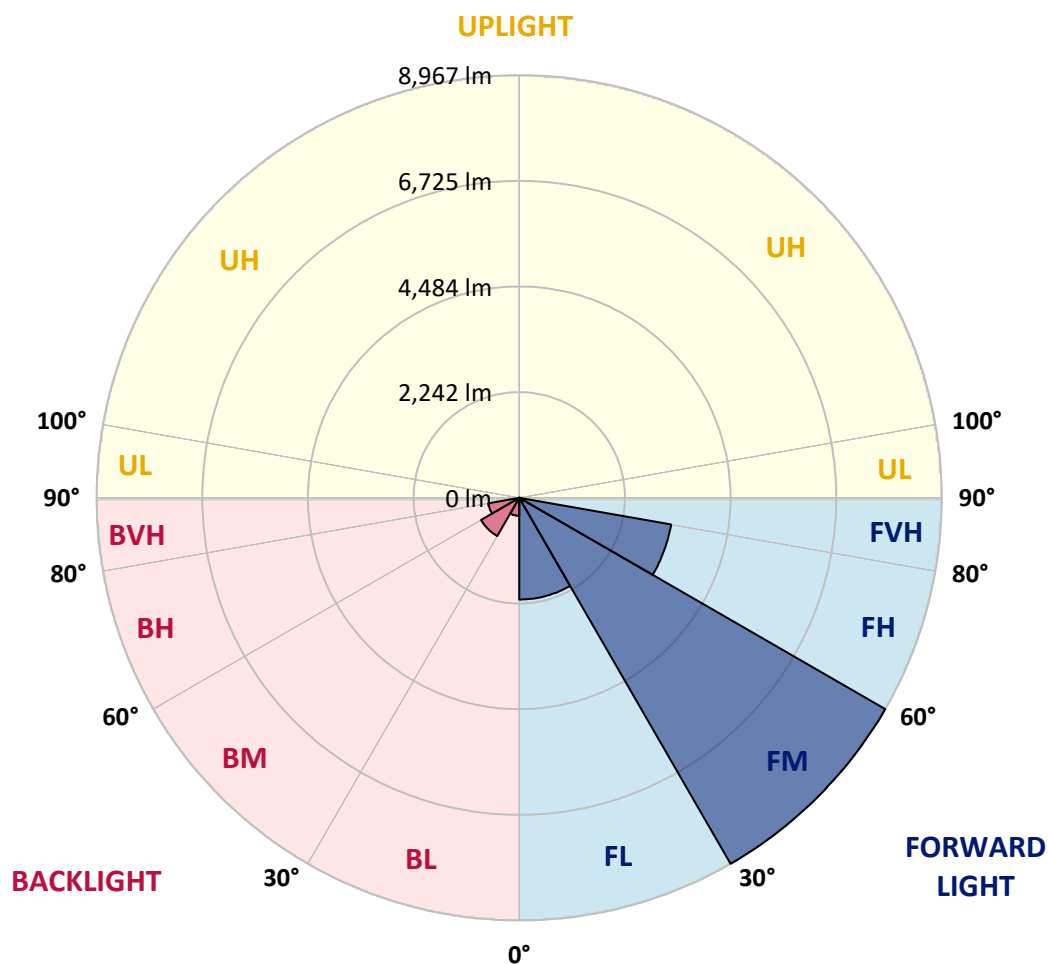
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2158.1	13.1			
FM	(30°-60°)	8967.2	54.5			
FH	(60°-80°)	3271.2	19.9			G2/5000
FVH	(80°-90°)	57.3	0.3			G1/100
BL	(0°-30°)	381.9	2.3	B1/500		
BM	(30°-60°)	936.4	5.7	B1/1000		
BH	(60°-80°)	667.8	4.1	B2/1000		G2/1000
BVH	(80°-90°)	15.1	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2175.2	2175.2	2175.2	2175.2	2175.2	2175.2	2175.2	2175.2	2175.2	2175.2	2175.2
2.5°	2695.3	2648.0	2702.1	2695.3	2648.0	2617.6	2523.0	2492.6	2381.2	2300.1	2229.2
5°	3249.2	3201.9	3249.2	3235.7	3168.2	3093.8	2938.5	2837.2	2637.9	2462.2	2303.5
7.5°	3708.6	3708.6	3728.8	3732.2	3651.1	3536.3	3343.8	3191.8	2911.5	2641.3	2387.9
10°	4205.1	4208.4	4252.4	4222.0	4113.9	3958.5	3715.3	3522.8	3185.0	2830.4	2469.0
12.5°	4735.3	4738.7	4752.2	4738.7	4610.4	4411.1	4117.3	3863.9	3475.5	3046.6	2580.5
15°	5265.6	5269.0	5285.9	5262.2	5120.4	4887.3	4553.0	4242.2	3782.9	3289.7	2715.6
17.5°	5762.1	5768.9	5782.4	5752.0	5603.4	5326.4	4985.3	4610.4	4110.5	3549.8	2867.6
20°	6208.0	6214.7	6224.9	6184.3	6035.7	5758.7	5390.6	4998.8	4444.9	3816.6	3033.1
22.5°	6657.2	6663.9	6680.8	6626.8	6461.3	6143.8	5782.4	5377.1	4799.5	4110.5	3225.6
25°	7231.4	7238.1	7251.6	7173.9	6947.7	6576.1	6194.5	5779.0	5184.6	4441.5	3462.0
27.5°	8072.4	8065.6	8065.6	7923.8	7535.3	7052.4	6609.9	6187.7	5600.0	4796.1	3722.1
30°	9112.7	9095.8	9085.7	8893.1	8339.2	7589.4	7035.5	6569.4	5998.6	5171.1	4002.4
32.5°	10044.9	10044.9	10024.6	9822.0	9234.3	8312.2	7488.1	6940.9	6383.6	5549.3	4292.9
35°	10595.4	10619.1	10608.9	10456.9	10028.0	9089.0	8099.4	7386.7	6788.9	5944.5	4640.8
37.5°	10669.7	10717.0	10727.1	10636.0	10409.7	9724.0	8778.3	7869.7	7234.7	6370.1	4978.5
40°	10369.1	10470.5	10470.5	10456.9	10375.9	10024.6	9349.1	8430.4	7694.1	6812.5	5319.7
42.5°	9906.4	10011.1	9997.6	10048.3	10028.0	9953.7	9670.0	8953.9	8153.4	7268.5	5630.4
45°	9301.8	9409.9	9382.9	9474.1	9514.6	9595.7	9636.2	9318.7	8606.0	7765.0	5978.3
47.5°	8332.5	8514.8	8555.4	8717.5	8886.4	9139.7	9332.2	9450.4	9028.2	8298.7	6356.6
50°	6900.4	7157.1	7238.1	7579.3	8042.0	8565.5	8876.2	9288.3	9325.5	8845.8	6765.3
52.5°	4941.4	5238.6	5363.6	5924.2	6876.7	7788.7	8349.3	8930.3	9440.3	9369.4	7207.7
55°	3195.2	3448.5	3570.1	4097.0	5363.6	6795.7	7727.9	8467.6	9376.1	9849.0	7714.4
57.5°	1969.1	2114.4	2195.4	2648.0	3813.3	5522.3	6913.9	8042.0	9180.2	10264.4	8241.3
60°	1327.4	1411.8	1452.4	1665.1	2590.6	4127.4	5795.9	7596.1	8923.5	10544.8	8720.9
62.5°	881.5	908.6	949.1	1080.8	1709.0	2898.0	4451.6	6799.0	8731.0	10561.6	9075.5
65°	682.3	695.8	712.7	770.1	1053.8	2026.5	3131.0	5508.8	8443.9	10203.6	9187.0
67.5°	537.0	550.5	570.8	601.2	763.3	1374.7	2131.2	4036.2	7856.2	9642.9	9004.6
70°	422.2	432.3	445.8	472.9	594.5	996.4	1408.4	2681.8	6670.7	9109.3	8430.4
72.5°	334.4	344.5	358.0	385.0	483.0	729.6	966.0	1671.9	5144.0	8457.4	7325.9
75°	263.5	270.2	280.3	307.4	388.4	567.4	655.2	999.8	3495.8	7265.1	5708.1
77.5°	131.7	162.1	185.8	212.8	283.7	391.8	435.7	553.9	1476.0	3728.8	2722.3
80°	77.7	94.6	101.3	118.2	185.8	236.4	236.4	222.9	466.1	1432.1	1111.2
82.5°	43.9	60.8	64.2	67.6	111.5	135.1	108.1	81.1	94.6	479.6	324.2
85°	13.5	20.3	23.6	27.0	37.2	40.5	37.2	33.8	27.0	47.3	30.4
87.5°	0.0	0.0	0.0	0.0	3.4	6.8	6.8	6.8	10.1	10.1	10.1
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°	2175.2	2175.2	2175.2	2175.2	2175.2	2175.2	2175.2	2175.2	2175.2	2175.2	2175.2
2.5°	2188.7	2144.8	2060.3	1982.6	1908.3	1854.3	1803.6	1756.3	1722.6	1695.5	1692.2
5°	2219.1	2131.2	1969.1	1817.1	1678.6	1563.8	1465.9	1388.2	1330.8	1290.2	1286.9
7.5°	2259.6	2124.5	1877.9	1651.6	1445.6	1280.1	1138.2	1033.5	959.2	928.8	905.2
10°	2293.4	2117.7	1786.7	1486.1	1215.9	1006.5	837.6	732.9	678.9	658.6	648.5
12.5°	2350.8	2124.5	1709.0	1334.1	1016.6	770.1	641.7	584.3	560.7	543.8	540.4
15°	2435.2	2154.9	1634.7	1185.5	814.0	621.5	547.2	510.0	486.4	483.0	479.6
17.5°	2519.7	2181.9	1567.2	1033.5	675.5	540.4	489.7	459.3	442.5	439.1	439.1
20°	2617.6	2215.7	1492.9	888.3	577.6	486.4	445.8	422.2	401.9	398.6	398.6
22.5°	2732.5	2263.0	1422.0	760.0	513.4	445.8	412.1	385.0	368.2	364.8	364.8
25°	2887.8	2333.9	1364.5	665.4	469.5	412.1	381.7	358.0	344.5	337.8	337.8
27.5°	3060.1	2431.8	1324.0	608.0	439.1	385.0	354.6	334.4	320.9	314.1	314.1
30°	3252.6	2539.9	1297.0	584.3	422.2	361.4	334.4	314.1	297.2	293.8	293.8
32.5°	3465.4	2664.9	1280.1	587.7	418.8	344.5	314.1	293.8	280.3	273.6	273.6
35°	3701.8	2803.4	1270.0	608.0	425.6	331.0	297.2	277.0	263.5	256.7	256.7
37.5°	3965.3	2965.5	1270.0	628.2	442.5	327.6	280.3	260.1	249.9	243.2	243.2
40°	4211.8	3137.8	1283.5	651.9	459.3	327.6	266.8	249.9	236.4	229.7	229.7
42.5°	4404.3	3235.7	1293.6	675.5	469.5	324.2	253.3	236.4	226.3	219.5	219.5
45°	4623.9	3340.4	1273.3	685.6	469.5	317.5	243.2	226.3	216.2	209.4	209.4
47.5°	4867.1	3468.8	1270.0	692.4	459.3	304.0	233.1	216.2	209.4	202.7	202.7
50°	5113.6	3610.6	1276.7	689.0	445.8	283.7	219.5	209.4	199.3	192.5	192.5
52.5°	5394.0	3759.2	1290.2	682.3	415.4	260.1	209.4	199.3	189.1	182.4	179.0
55°	5704.7	3921.4	1317.3	668.8	374.9	236.4	199.3	189.1	175.6	168.9	165.5
57.5°	6062.7	4120.6	1347.6	641.7	331.0	216.2	189.1	175.6	155.4	145.2	141.9
60°	6403.9	4346.9	1381.4	577.6	287.1	195.9	179.0	158.7	138.5	131.7	128.3
62.5°	6724.7	4569.8	1398.3	462.7	243.2	179.0	168.9	145.2	125.0	118.2	114.8
65°	6930.8	4813.0	1361.2	314.1	199.3	165.5	155.4	135.1	114.8	104.7	104.7
67.5°	6944.3	4927.9	1232.8	206.0	162.1	148.6	141.9	121.6	101.3	94.6	91.2
70°	6603.1	4755.6	942.3	162.1	135.1	128.3	128.3	108.1	87.8	81.1	77.7
72.5°	5819.5	4211.8	601.2	131.7	114.8	108.1	108.1	91.2	77.7	67.6	64.2
75°	4593.5	3249.2	320.9	108.1	94.6	91.2	84.4	74.3	64.2	57.4	54.0
77.5°	2111.0	1432.1	148.6	77.7	70.9	70.9	64.2	54.0	50.7	43.9	43.9
80°	834.3	486.4	74.3	50.7	47.3	47.3	47.3	37.2	37.2	30.4	27.0
82.5°	229.7	101.3	37.2	30.4	30.4	30.4	27.0	23.6	23.6	20.3	20.3
85°	23.6	16.9	16.9	16.9	16.9	13.5	13.5	10.1	6.8	6.8	6.8
87.5°	10.1	10.1	10.1	10.1	10.1	6.8	3.4	0.0	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)