

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: P214716

Luminaire Tested: **ARCH-AF24-50-D-U-T3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214716
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-50-D-U-T3-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5861 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

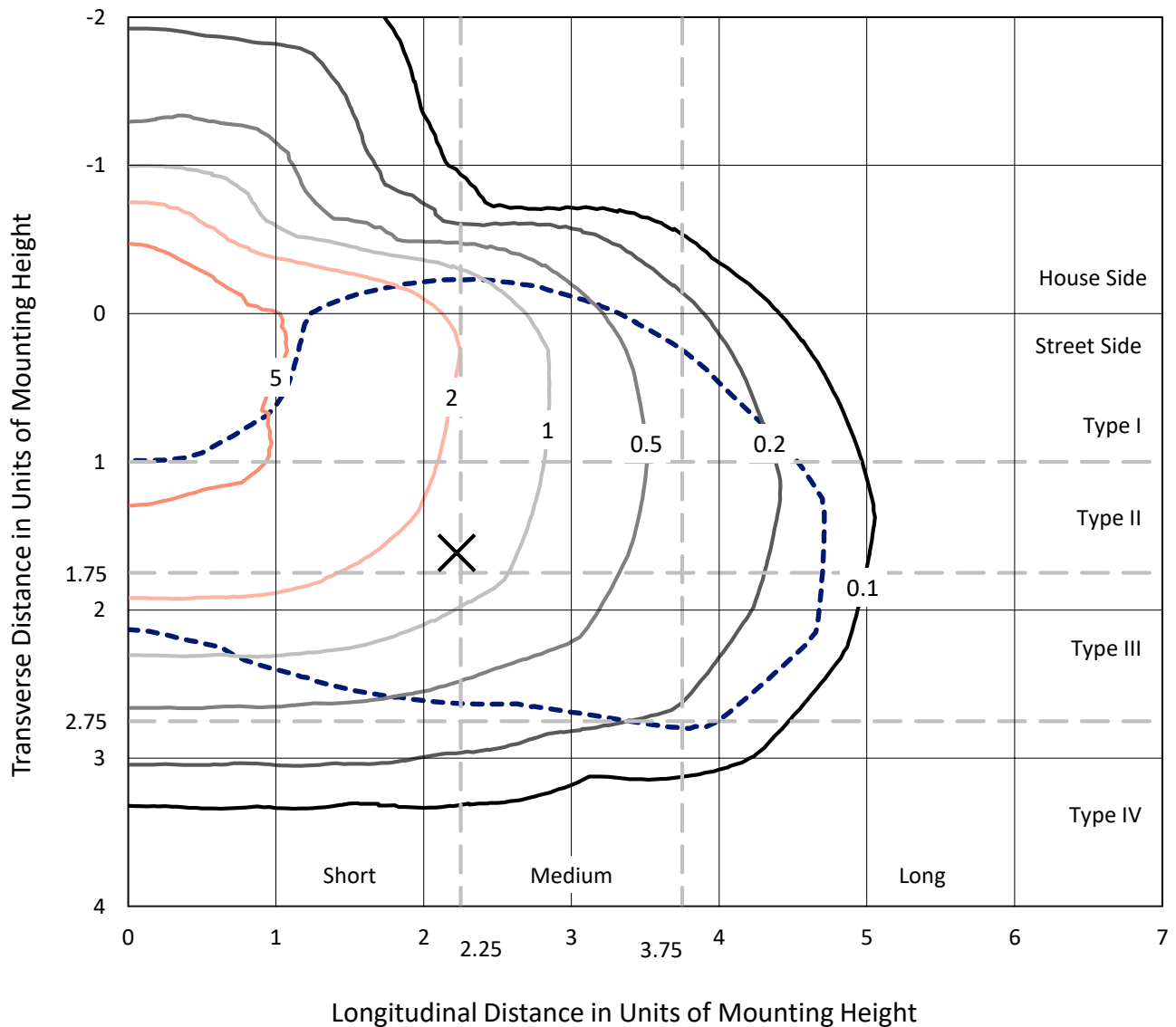
Input Watts (W): 54
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

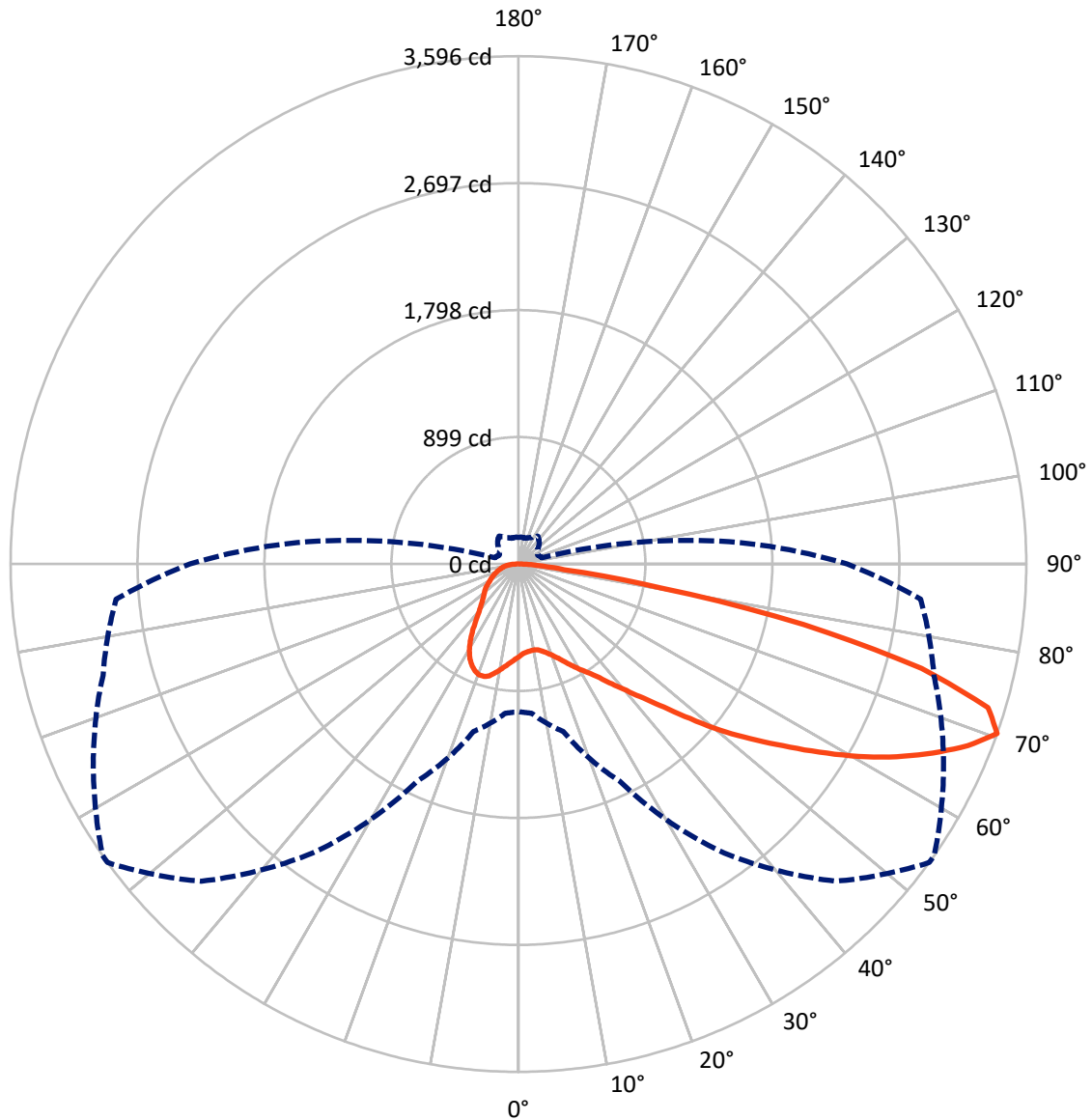
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.6 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1329.3	0.0	1329.3
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	4531.7	0.0	4531.7
	% Fixture	77.3	0.0	77.3
Total	Lumens	5861.0	0.0	5861.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.4	1.1
10°-20°	205.6	3.5
20°-30°	357.2	6.1
30°-40°	522.1	8.9
40°-50°	819.3	14.0
50°-60°	1260.0	21.5
60°-70°	1539.4	26.3
70°-80°	954.4	16.3
80°-90°	138.7	2.4
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°	5861.0	100.0
0°-180°	5861.0	100.0

Coefficient of Utilization



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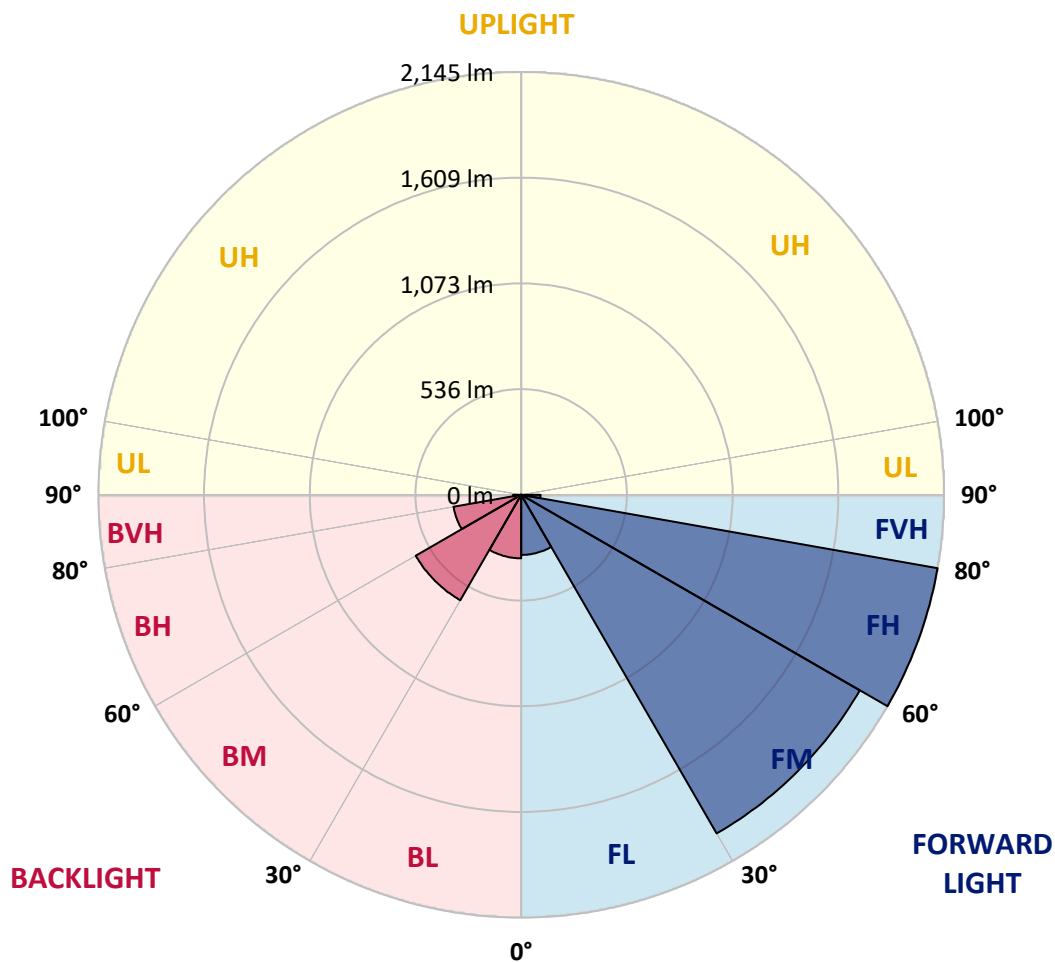
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	304.9	5.2			
FM	(30°-60°)	1983.7	33.8			
FH	(60°-80°)	2145.2	36.6			G2/5000
FVH	(80°-90°)	97.9	1.7			G1/100
BL	(0°-30°)	322.3	5.5	B1/500		
BM	(30°-60°)	617.7	10.5	B1/1000		
BH	(60°-80°)	348.6	5.9	B1/500		G1/500
BVH	(80°-90°)	40.7	0.7			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°	54°	55°	65°	75°	85°
0°	655.7	655.7	655.7	655.7	655.7	655.7	655.7	655.7	655.7	655.7	655.7
2.5°	630.0	627.8	627.8	631.0	632.1	635.3	635.3	636.4	639.6	645.0	651.4
5°	610.7	609.6	610.7	614.9	617.1	623.5	625.7	626.8	633.2	641.8	651.4
7.5°	591.3	590.3	592.4	598.8	605.3	614.9	620.3	621.4	631.0	642.8	655.7
10°	584.9	583.8	587.0	592.4	598.8	609.6	618.2	619.2	633.2	647.1	665.4
12.5°	593.5	592.4	595.6	601.0	607.4	614.9	624.6	625.7	643.9	662.2	681.5
15°	614.9	614.9	616.0	619.2	625.7	632.1	640.7	641.8	661.1	682.6	701.9
17.5°	648.2	646.1	646.1	645.0	649.3	652.5	663.2	664.3	684.7	704.0	723.3
20°	689.0	687.9	683.6	678.3	677.2	679.3	690.1	691.1	711.5	727.6	745.9
22.5°	738.4	739.4	729.8	718.0	712.6	715.8	725.5	726.6	741.6	755.5	771.6
25°	803.8	800.6	786.7	769.5	758.8	758.8	768.4	768.4	782.4	791.0	801.7
27.5°	866.1	859.6	846.8	822.1	804.9	808.1	817.8	817.8	830.7	833.9	839.2
30°	933.7	927.2	911.2	880.0	857.5	855.3	867.1	866.1	883.2	882.2	877.9
32.5°	1016.3	1013.1	986.3	946.6	916.5	909.0	919.7	920.8	931.5	928.3	914.4
35°	1132.2	1131.2	1106.5	1036.7	997.0	983.1	989.5	989.5	997.0	988.4	964.8
37.5°	1278.2	1280.3	1258.9	1155.8	1100.0	1076.4	1077.5	1076.4	1078.6	1068.9	1044.2
40°	1424.1	1429.5	1428.4	1303.9	1233.1	1192.3	1177.3	1175.2	1180.5	1176.2	1152.6
42.5°	1616.2	1629.1	1599.1	1486.4	1407.0	1338.3	1297.5	1292.1	1303.9	1309.3	1286.8
45°	1815.9	1811.6	1764.3	1682.8	1610.9	1522.9	1445.6	1437.0	1445.6	1461.7	1438.1
47.5°	1920.0	1916.7	1904.9	1864.2	1853.4	1752.5	1635.6	1628.1	1612.0	1634.5	1606.6
50°	2091.7	2094.9	2046.6	2042.3	2087.4	2031.6	1850.2	1833.0	1804.1	1822.3	1798.7
52.5°	2216.2	2202.2	2172.2	2209.7	2350.3	2320.3	2052.0	2044.5	2017.6	2013.3	2002.6
55°	2266.6	2266.6	2272.0	2358.9	2559.6	2519.9	2270.9	2278.4	2241.9	2211.9	2225.8
57.5°	2281.6	2288.1	2334.2	2478.0	2805.4	2675.5	2512.4	2523.1	2470.5	2410.4	2454.4
60°	2207.6	2226.9	2337.4	2545.6	2943.8	2840.8	2766.7	2769.9	2693.7	2605.7	2683.0
62.5°	2017.6	2041.2	2238.7	2573.5	2921.3	3010.3	3007.1	3014.6	2910.5	2801.1	2897.7
65°	1784.7	1808.3	2018.7	2495.2	2904.1	3131.6	3227.1	3247.5	3113.4	2966.3	3031.8
67.5°	1442.4	1473.5	1673.1	2231.2	2820.4	3231.4	3433.2	3454.6	3270.1	3052.2	3020.0
70°	1045.3	1060.3	1227.7	1695.7	2479.1	3176.7	3596.3	3595.2	3321.6	3045.8	2859.0
72.5°	503.3	515.1	660.0	1052.8	1772.9	2695.9	3478.3	3498.6	3250.7	2952.4	2490.9
75°	207.1	218.9	267.2	444.3	930.5	1781.5	2948.1	2996.4	2952.4	2649.7	1948.9
77.5°	128.8	133.1	156.7	229.7	425.0	831.7	2063.8	2129.2	2339.6	2122.8	1286.8
80°	96.6	99.8	117.0	161.0	268.3	306.9	1024.9	1107.5	1417.7	1218.1	582.7
82.5°	80.5	81.6	93.4	117.0	182.4	176.0	328.4	366.0	661.1	464.7	200.7
85°	75.1	77.3	83.7	83.7	115.9	110.5	136.3	142.7	192.1	158.8	69.8
87.5°	38.6	36.5	74.1	65.5	60.1	53.7	58.0	62.2	71.9	76.2	31.1
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°	655.7	655.7	655.7	655.7	655.7	655.7	655.7	655.7	655.7	655.7	655.7
2.5°	653.6	656.8	662.2	667.5	674.0	681.5	685.8	691.1	695.4	693.3	692.2
5°	656.8	662.2	674.0	684.7	697.6	712.6	722.3	733.0	741.6	743.7	740.5
7.5°	662.2	671.8	687.9	707.2	724.4	743.7	758.8	773.8	784.5	786.7	786.7
10°	675.0	685.8	707.2	733.0	753.4	773.8	791.0	802.8	812.4	816.7	816.7
12.5°	693.3	706.2	731.9	763.0	785.6	804.9	814.6	819.9	824.2	828.5	829.6
15°	714.8	728.7	759.8	793.1	816.7	826.4	826.4	825.3	825.3	827.4	829.6
17.5°	736.2	751.2	783.4	818.9	833.9	828.5	821.0	817.8	815.6	814.6	817.8
20°	758.8	773.8	806.0	839.2	835.0	812.4	801.7	794.2	787.7	784.5	788.8
22.5°	783.4	797.4	830.7	853.2	821.0	786.7	766.3	754.5	743.7	737.3	741.6
25°	812.4	826.4	858.6	857.5	796.3	748.0	715.8	696.5	684.7	678.3	678.3
27.5°	846.8	858.6	889.7	846.8	762.0	696.5	649.3	631.0	627.8	622.5	622.5
30°	882.2	891.8	918.7	822.1	714.8	628.9	577.4	568.8	569.9	564.5	565.6
32.5°	918.7	928.3	935.8	785.6	653.6	552.7	518.4	511.9	510.8	506.6	502.3
35°	970.2	984.1	938.0	736.2	579.5	489.4	464.7	458.3	451.8	436.8	436.8
37.5°	1048.5	1063.5	932.6	675.0	503.3	440.0	417.5	408.9	398.2	383.1	377.8
40°	1155.8	1155.8	920.8	606.4	442.2	400.3	378.8	368.1	356.3	341.3	338.1
42.5°	1282.5	1252.4	902.6	536.6	397.1	373.5	354.2	342.4	328.4	311.2	309.1
45°	1430.6	1349.0	876.8	474.4	363.8	357.4	345.6	325.2	301.6	283.3	280.1
47.5°	1574.4	1435.9	852.1	430.4	335.9	350.9	341.3	306.9	274.7	249.0	245.8
50°	1732.2	1513.2	823.1	393.9	314.4	346.6	335.9	280.1	244.7	226.4	224.3
52.5°	1889.9	1591.6	792.0	355.2	296.2	338.1	323.0	260.8	243.6	218.9	215.7
55°	2056.3	1682.8	755.5	312.3	274.7	320.9	305.9	259.7	251.1	218.9	211.4
57.5°	2218.3	1783.7	696.5	270.4	251.1	295.1	299.4	253.3	235.0	216.8	208.2
60°	2397.5	1891.0	598.8	235.0	230.7	273.7	290.8	239.3	216.8	210.3	206.1
62.5°	2541.3	1987.6	467.9	210.3	213.6	256.5	280.1	230.7	209.3	203.9	202.8
65°	2603.6	1989.7	335.9	188.9	196.4	240.4	269.4	223.2	202.8	200.7	199.6
67.5°	2538.1	1880.3	236.1	168.5	178.2	225.4	255.4	215.7	196.4	197.5	195.3
70°	2326.7	1649.5	172.8	149.2	161.0	209.3	240.4	206.1	188.9	191.0	187.8
72.5°	1946.8	1285.7	138.4	133.1	147.0	192.1	225.4	195.3	177.1	178.2	171.7
75°	1438.1	852.1	115.9	119.1	130.9	176.0	206.1	181.4	164.2	159.9	155.6
77.5°	855.3	437.9	95.5	104.1	117.0	156.7	184.6	164.2	150.2	142.7	139.5
80°	353.1	177.1	78.3	88.0	102.0	139.5	163.1	143.8	134.2	126.6	122.3
82.5°	140.6	86.9	62.2	71.9	85.9	121.3	142.7	126.6	117.0	111.6	99.8
85°	53.7	42.9	41.9	50.4	64.4	93.4	118.1	106.2	98.7	84.8	81.6
87.5°	21.5	19.3	19.3	24.7	36.5	59.0	84.8	74.1	77.3	61.2	62.2
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)