

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: P214587

Luminaire Tested: **ARCH-AF24-20-D-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214587
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-20-D-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2924.6 lumens
Efficiency: N/A
Efficacy: 139.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 21
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

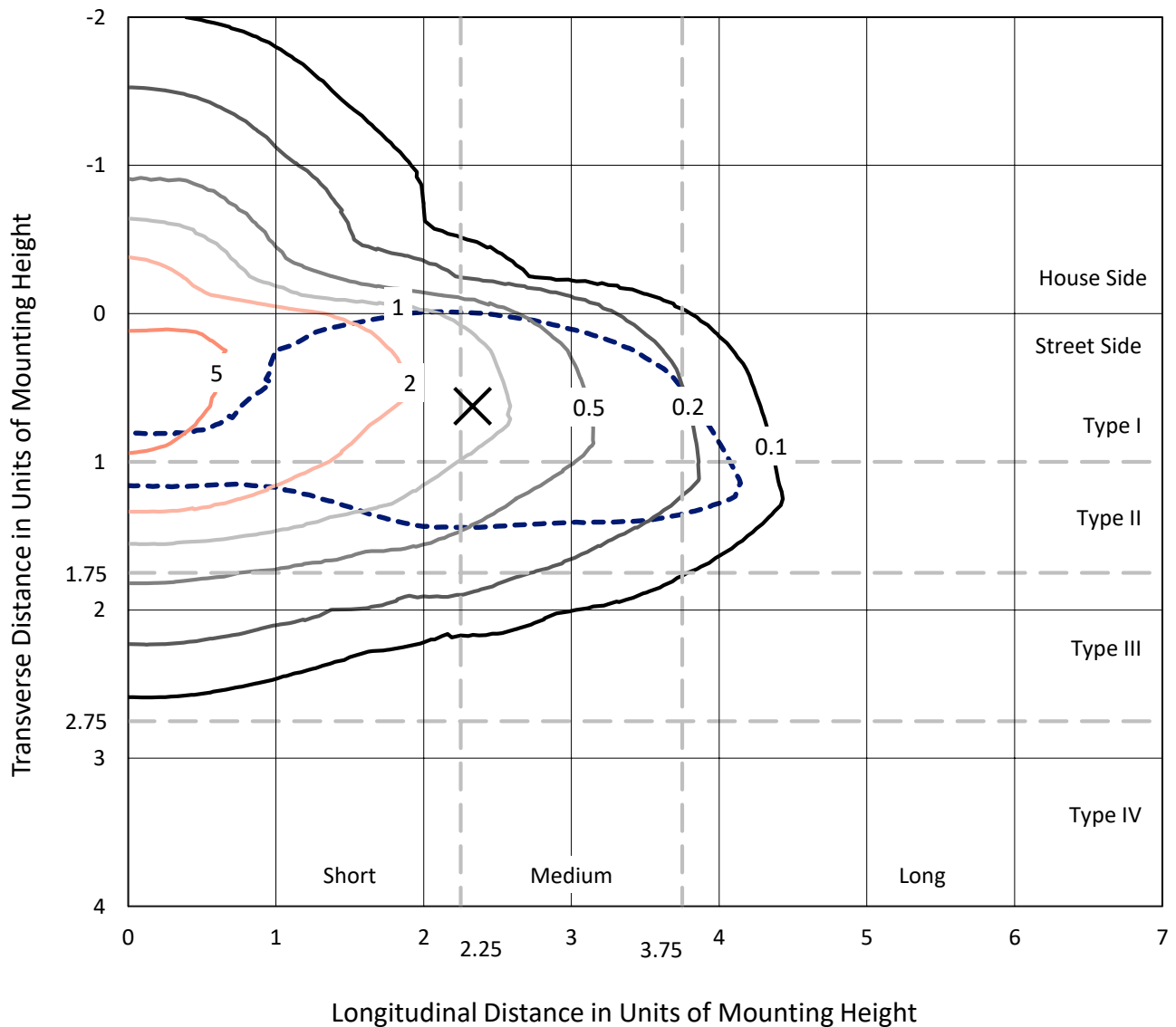


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

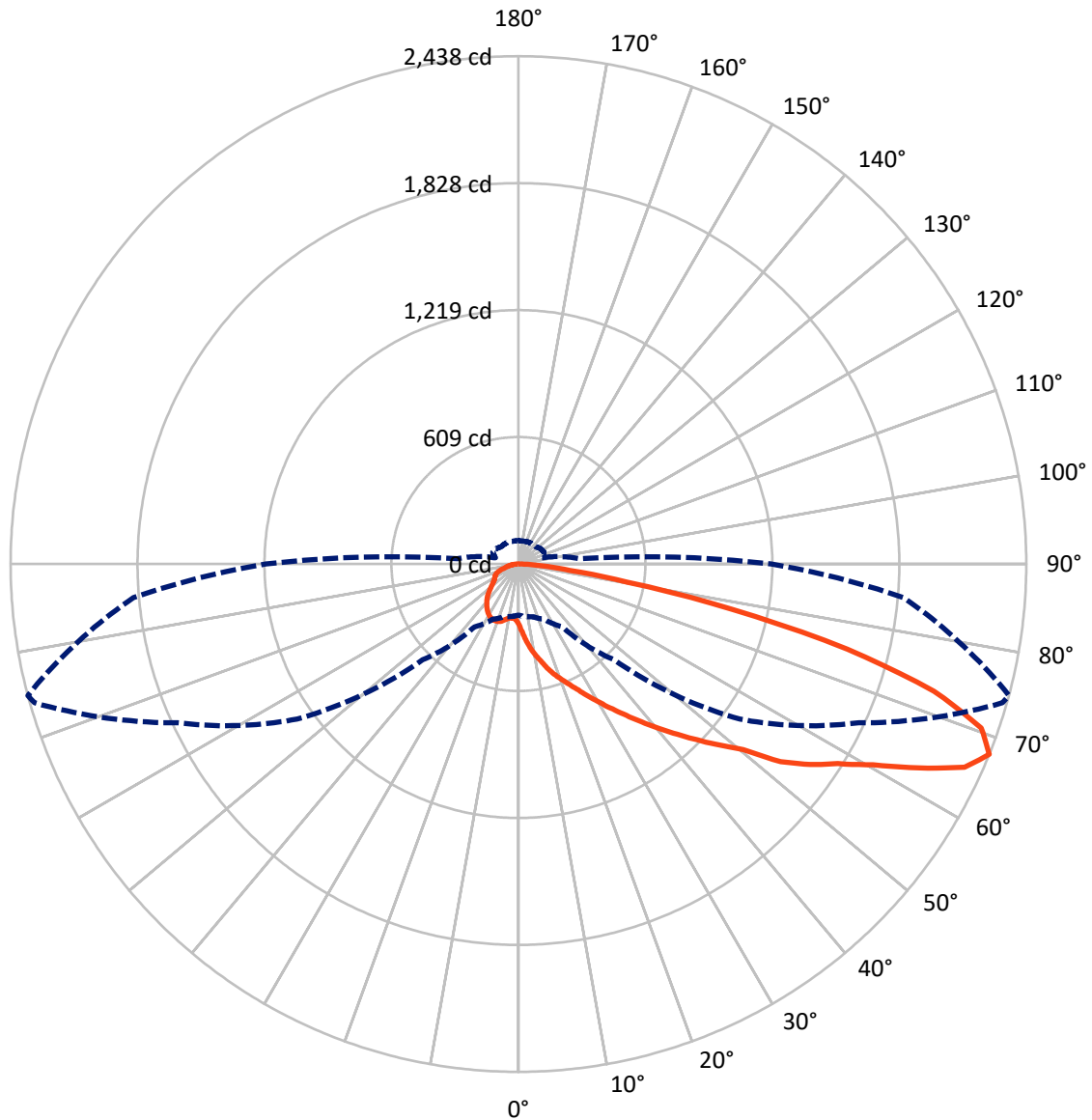


Based on 10 foot mounting height. Maximum calculated value = 6.1 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	499.4	0.0	499.4
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	2425.2	0.0	2425.2
	% Fixture	82.9	0.0	82.9
Total	Lumens	2924.6	0.0	2924.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.0	1.2
10°-20°	123.0	4.2
20°-30°	224.4	7.7
30°-40°	368.3	12.6
40°-50°	532.7	18.2
50°-60°	627.8	21.5
60°-70°	610.0	20.9
70°-80°	339.1	11.6
80°-90°	65.2	2.2
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°	2924.6	100.0
0°-180°	2924.6	100.0

Coefficient of Utilization



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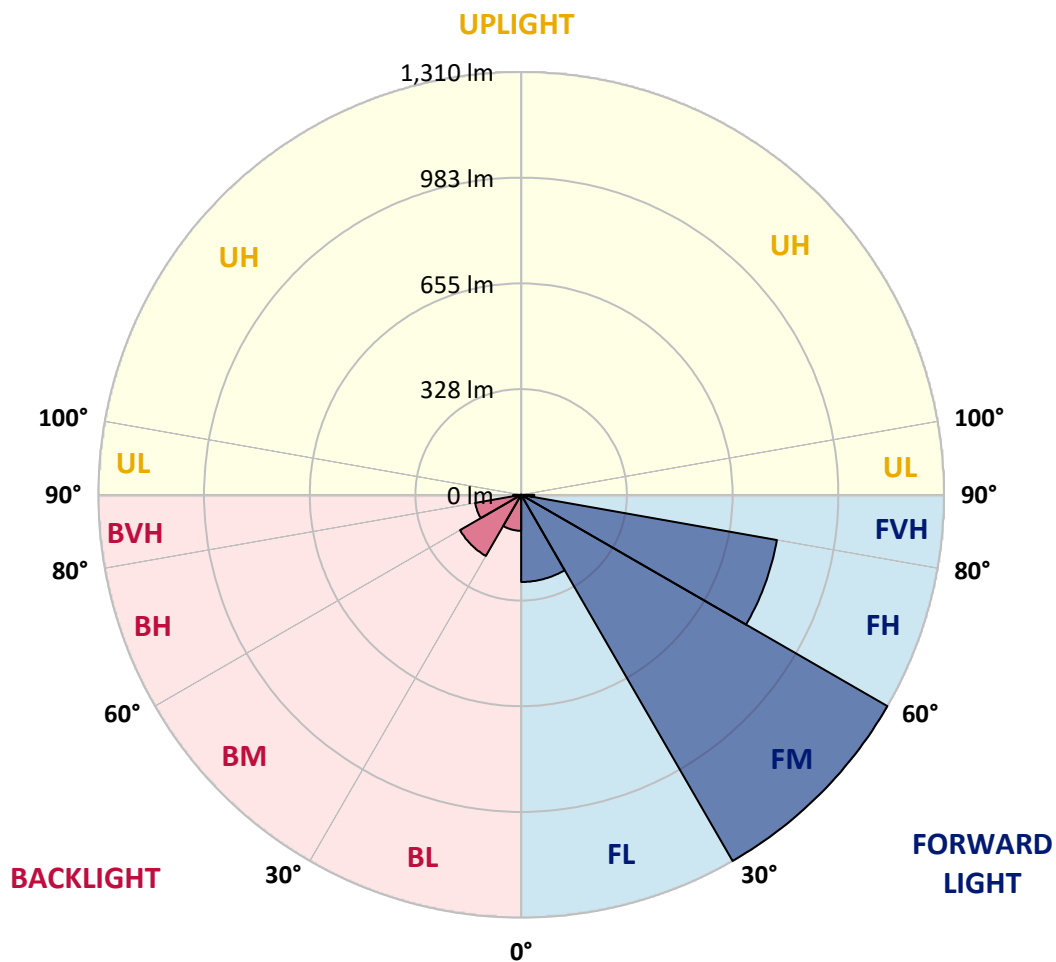
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	270.0	9.2			
FM (30°-60°)	1310.1	44.8			
FH (60°-80°)	804.5	27.5			G1/1800
FVH (80°-90°)	40.6	1.4			G1/100
BL (0°-30°)	111.5	3.8	B1/500		
BM (30°-60°)	218.7	7.5	B0/220		
BH (60°-80°)	144.6	4.9	B1/500		G1/500
BVH (80°-90°)	24.6	0.8			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	289.8	289.8	289.8	289.8	289.8	289.8	289.8	289.8	289.8	289.8	289.8
2.5°	410.8	412.0	409.6	404.2	396.2	381.6	368.7	346.1	325.9	323.5	302.1
5°	483.0	484.3	481.2	474.4	465.9	450.0	432.3	402.9	370.5	364.4	319.2
7.5°	532.5	533.2	529.5	522.7	516.0	500.1	482.4	449.4	409.6	404.8	341.2
10°	574.7	575.9	571.0	566.7	559.5	543.5	525.2	490.3	449.4	442.6	363.8
12.5°	613.9	615.1	612.0	608.3	605.9	591.3	571.0	529.5	485.5	478.1	390.7
15°	640.2	641.4	642.0	646.8	649.9	639.5	619.3	574.1	524.6	517.8	422.5
17.5°	632.8	635.9	645.0	662.8	681.7	682.3	665.8	618.2	563.1	555.8	454.9
20°	611.4	613.9	624.8	651.7	689.1	710.4	709.2	662.8	599.1	591.3	484.9
22.5°	629.1	632.2	632.2	648.7	685.4	725.1	741.0	706.8	635.3	627.9	514.7
25°	704.9	706.8	694.0	687.2	700.6	737.3	767.3	754.4	679.2	670.7	547.2
27.5°	810.7	807.6	791.8	764.9	750.1	760.0	790.5	799.7	730.0	719.6	580.8
30°	915.8	914.0	895.7	859.6	826.6	805.8	816.2	840.0	785.0	772.8	613.3
32.5°	1014.3	1011.3	991.0	948.9	911.6	873.1	852.9	876.8	843.7	829.6	649.3
35°	1104.8	1096.8	1076.7	1032.7	994.1	957.5	908.0	911.6	907.4	892.6	689.1
37.5°	1178.1	1172.0	1150.0	1109.1	1068.1	1033.3	981.3	951.3	975.8	961.7	734.9
40°	1243.0	1236.2	1213.6	1172.6	1134.8	1101.7	1060.8	999.6	1052.8	1037.0	786.2
42.5°	1291.9	1287.0	1268.7	1228.3	1191.6	1161.7	1141.5	1060.8	1132.9	1117.7	842.5
45°	1318.2	1313.3	1303.4	1271.1	1237.5	1214.2	1216.1	1133.5	1216.7	1203.8	909.1
47.5°	1285.7	1289.4	1298.0	1291.9	1271.1	1260.1	1282.7	1208.7	1310.2	1298.0	981.3
50°	1198.9	1202.6	1236.8	1279.0	1286.4	1299.9	1342.6	1295.6	1409.2	1399.5	1070.5
52.5°	985.6	1005.8	1100.5	1201.4	1270.5	1326.2	1409.2	1424.6	1576.2	1576.2	1228.3
55°	744.7	762.4	870.6	1046.7	1208.7	1328.6	1458.2	1512.0	1696.7	1699.0	1310.8
57.5°	603.4	614.5	667.7	848.0	1079.1	1298.0	1516.2	1587.2	1796.9	1807.9	1417.2
60°	489.7	495.8	530.7	656.0	900.0	1215.5	1557.9	1694.8	1939.9	1955.3	1552.9
62.5°	393.7	399.9	423.1	498.3	706.1	1060.8	1550.5	1806.6	2130.7	2155.8	1730.8
65°	314.3	321.0	336.2	382.7	523.3	868.8	1475.3	1864.1	2328.2	2352.7	1848.9
67.5°	245.2	251.2	261.7	292.3	368.7	649.9	1297.4	1803.6	2416.8	2437.6	1855.0
70°	185.3	188.3	196.9	216.5	263.5	431.7	1015.5	1600.6	2337.3	2356.3	1732.7
72.5°	143.7	143.1	147.9	157.7	184.0	297.2	673.1	1301.7	2066.5	2086.1	1478.4
75°	117.4	116.8	119.8	122.9	133.3	199.3	397.4	980.1	1667.9	1630.6	1109.1
77.5°	99.0	98.4	101.5	102.1	106.4	137.6	226.2	645.0	1112.8	1048.5	624.8
80°	83.8	83.2	86.8	88.1	91.1	100.9	130.2	349.1	558.8	529.5	298.4
82.5°	63.0	65.5	72.1	75.2	78.9	74.6	80.7	154.1	259.2	247.7	129.6
85°	30.6	36.1	54.4	60.6	64.9	47.1	55.0	72.7	116.8	111.3	52.6
87.5°	10.4	9.2	32.4	38.6	42.1	21.4	30.6	40.3	48.3	44.0	16.5
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°	289.8	289.8	289.8	289.8	289.8	289.8	289.8	289.8	289.8	289.8	289.8
2.5°	292.9	283.7	270.3	259.8	253.1	247.7	245.2	244.6	243.4	242.7	242.7
5°	299.0	282.4	261.7	250.6	247.7	245.2	246.4	247.0	247.0	247.0	247.0
7.5°	308.1	284.9	259.8	252.5	251.9	251.9	255.5	257.4	258.6	258.6	258.6
10°	320.4	289.2	262.9	256.8	258.6	259.8	264.1	266.6	267.8	268.4	269.0
12.5°	336.9	298.4	269.0	264.1	266.6	267.2	270.3	271.5	272.7	273.3	273.3
15°	358.9	311.8	278.8	272.7	273.3	272.7	272.7	271.5	270.9	270.9	272.1
17.5°	381.6	324.7	287.3	278.8	276.3	271.5	267.8	264.7	262.9	261.7	262.3
20°	404.2	336.2	292.3	280.0	273.3	265.4	258.6	254.3	251.9	249.5	250.6
22.5°	426.8	347.3	294.1	276.3	266.6	254.9	247.7	240.9	235.4	231.7	232.3
25°	451.8	359.5	294.1	272.1	257.4	245.2	236.0	224.9	217.1	214.0	215.2
27.5°	476.9	369.9	291.0	264.1	247.0	234.8	221.4	208.5	203.6	201.7	202.3
30°	502.0	377.9	284.3	254.3	236.0	222.6	204.8	196.3	190.2	185.3	185.9
32.5°	527.0	383.3	275.2	242.1	224.3	207.2	192.6	182.8	171.8	165.7	166.3
35°	555.8	387.6	264.1	229.9	211.5	193.8	182.8	166.9	155.3	150.4	149.1
37.5°	585.7	390.7	252.5	216.5	198.7	184.0	173.0	153.4	142.5	135.7	135.1
40°	618.2	391.9	238.4	202.3	186.5	177.9	160.2	145.5	126.5	122.2	122.2
42.5°	656.6	391.3	224.3	188.3	173.0	163.9	151.0	144.3	127.8	123.5	121.0
45°	700.6	391.3	209.1	171.8	159.6	146.1	140.7	136.4	125.3	127.2	128.4
47.5°	750.7	390.1	190.8	158.4	148.5	137.0	133.9	124.7	120.4	121.6	122.9
50°	819.9	391.9	174.2	147.3	140.7	130.8	127.2	122.2	120.4	121.0	120.4
52.5°	915.8	385.8	158.4	140.7	134.5	121.6	121.6	121.0	121.6	121.0	121.0
55°	968.4	372.4	146.7	137.0	130.2	117.4	119.8	121.0	122.2	121.6	121.6
57.5°	1043.0	363.1	137.6	134.5	127.8	116.2	118.6	121.0	121.6	121.0	121.0
60°	1131.1	357.0	131.4	135.1	125.9	116.2	119.2	121.0	120.4	119.8	119.8
62.5°	1233.2	354.7	127.2	137.0	124.1	116.8	119.2	121.0	118.6	118.0	118.0
65°	1271.7	332.6	121.6	138.2	125.3	116.8	118.6	119.2	116.2	115.6	115.0
67.5°	1212.4	294.7	113.8	135.7	129.0	116.8	116.8	116.2	112.5	111.9	110.7
70°	1079.7	244.6	101.5	127.8	131.4	117.4	114.4	111.3	107.6	107.6	105.2
72.5°	884.0	192.6	85.6	113.8	129.6	119.2	109.5	105.2	100.9	100.9	98.4
75°	637.1	143.7	68.4	94.7	121.6	118.6	103.3	97.8	92.9	92.3	89.3
77.5°	363.1	100.9	55.6	74.0	108.2	115.6	97.8	89.3	83.8	81.9	80.1
80°	186.5	67.8	45.2	58.1	89.9	107.0	93.5	79.5	73.3	70.3	67.2
82.5°	88.7	45.2	34.9	42.8	67.8	93.5	88.1	68.4	61.8	58.1	54.4
85°	39.7	26.9	23.2	27.5	48.3	72.7	77.6	56.3	48.3	60.6	44.6
87.5°	12.9	12.3	12.3	12.9	23.2	31.8	56.9	41.5	38.6	31.8	26.9
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)