

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: P234683

Luminaire Tested: **ARCH-AF16-30-D-U-T2R-8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234683
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-AF16-30-D-U-T2R-8027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2955 lumens
Efficiency: N/A
Efficacy: 92.3 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

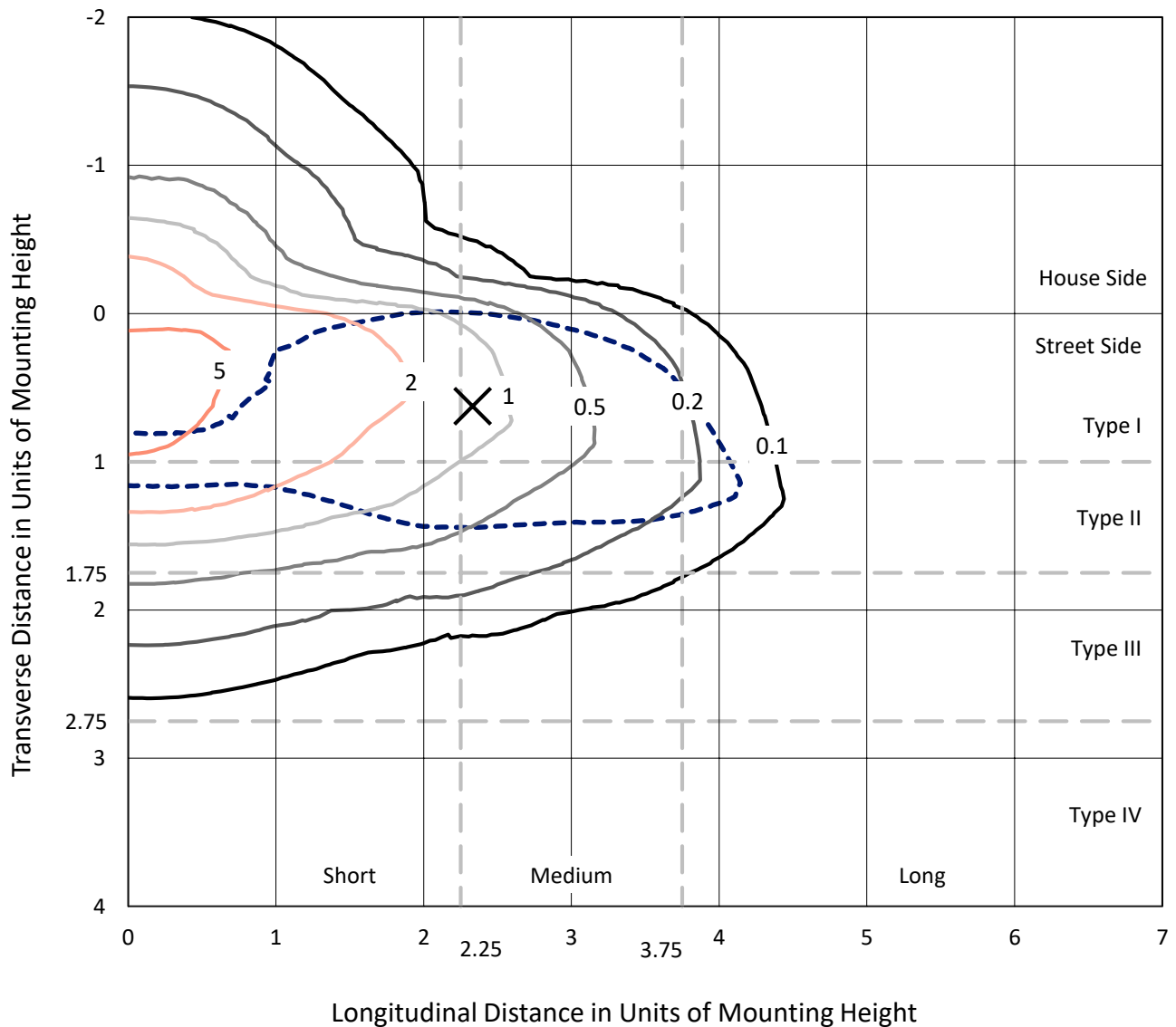
Input Watts (W): 32
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

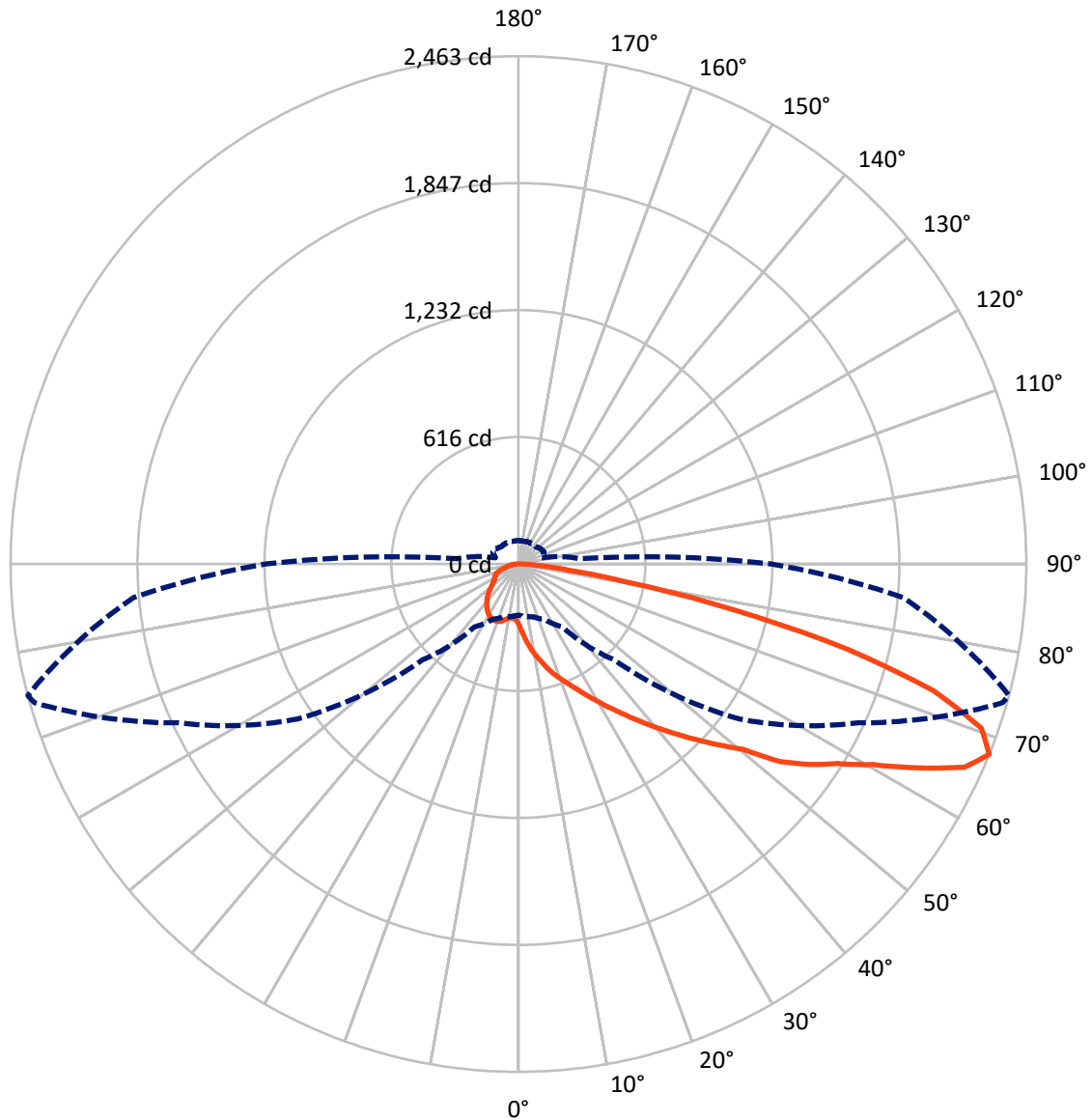
✕ Max cd
 - - - 1/2 Max cd



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	504.6	0.0	504.6
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	2450.4	0.0	2450.4
	% Fixture	82.9	0.0	82.9
Total	Lumens	2955.0	0.0	2955.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.4	1.2
10°-20°	124.3	4.2
20°-30°	226.7	7.7
30°-40°	372.2	12.6
40°-50°	538.2	18.2
50°-60°	634.3	21.5
60°-70°	616.4	20.9
70°-80°	342.6	11.6
80°-90°	65.9	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°	2955.0	100.0
0°-180°	2955.0	100.0



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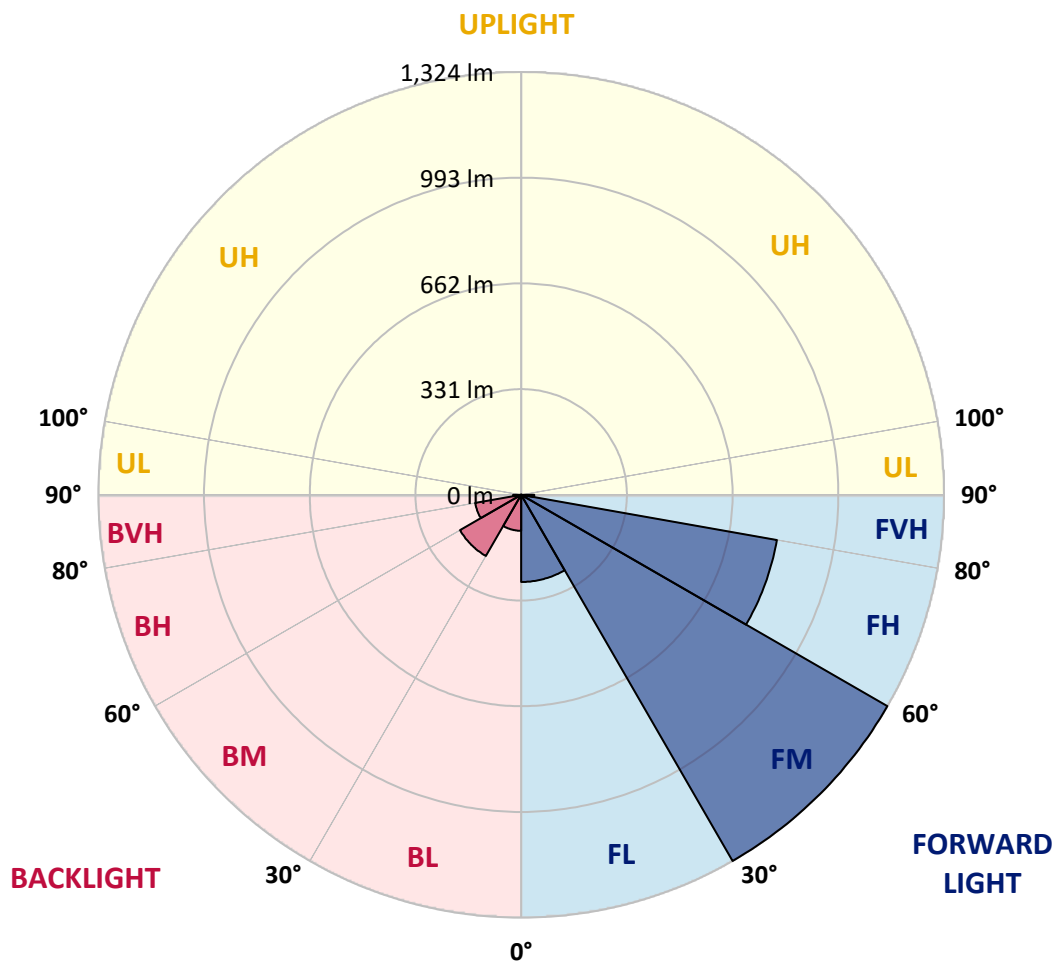
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	272.8	9.2			
FM (30°-60°)	1323.7	44.8			
FH (60°-80°)	812.9	27.5			G1/1800
FVH (80°-90°)	41.0	1.4			G1/100
BL (0°-30°)	112.6	3.8	B1/500		
BM (30°-60°)	221.0	7.5	B1/1000		
BH (60°-80°)	146.1	4.9	B1/500		G1/500
BVH (80°-90°)	24.9	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°	292.8	292.8	292.8	292.8	292.8	292.8	292.8	292.8	292.8	292.8	292.8
2.5°	415.1	416.4	413.9	408.3	400.3	385.5	372.5	349.6	329.3	326.8	305.2
5°	488.0	489.3	486.2	479.4	470.7	454.7	436.7	407.1	374.4	368.2	322.5
7.5°	538.1	538.7	535.0	528.2	521.4	505.3	487.4	454.0	413.9	408.9	344.7
10°	580.7	581.9	577.0	572.7	565.2	549.2	530.6	495.4	454.0	447.2	367.6
12.5°	620.2	621.5	618.4	614.7	612.2	597.4	577.0	535.0	490.5	483.1	394.7
15°	646.8	648.0	648.6	653.6	656.7	646.2	625.8	580.1	530.0	523.2	426.9
17.5°	639.4	642.5	651.7	669.6	688.8	689.4	672.7	624.5	568.9	561.5	459.6
20°	617.7	620.2	631.3	658.5	696.2	717.8	716.6	669.6	605.4	597.4	489.9
22.5°	635.7	638.7	638.7	655.4	692.5	732.6	748.7	714.1	641.8	634.4	520.1
25°	712.3	714.1	701.1	694.3	707.9	745.0	775.3	762.3	686.3	677.7	552.9
27.5°	819.1	816.0	800.0	772.8	758.0	767.9	798.7	808.0	737.6	727.1	586.9
30°	925.4	923.5	905.0	868.6	835.2	814.2	824.7	848.8	793.2	780.8	619.6
32.5°	1024.8	1021.8	1001.4	958.7	921.1	882.1	861.8	885.8	852.5	838.3	656.0
35°	1116.3	1108.2	1087.9	1043.4	1004.5	967.4	917.4	921.1	916.7	901.9	696.2
37.5°	1190.4	1184.2	1162.0	1120.6	1079.2	1044.0	991.5	961.2	985.9	971.7	742.5
40°	1255.9	1249.1	1226.2	1184.8	1146.5	1113.2	1071.8	1010.0	1063.8	1047.7	794.4
42.5°	1305.3	1300.4	1281.8	1241.1	1204.0	1173.7	1153.3	1071.8	1144.7	1129.2	851.3
45°	1331.9	1326.9	1317.0	1284.3	1250.3	1226.8	1228.7	1145.3	1229.3	1216.3	918.6
47.5°	1299.1	1302.8	1311.5	1305.3	1284.3	1273.2	1296.0	1221.3	1323.8	1311.5	991.5
50°	1211.4	1215.1	1249.7	1292.3	1299.7	1313.3	1356.6	1309.0	1423.9	1414.0	1081.7
52.5°	995.8	1016.2	1111.9	1213.9	1283.7	1339.9	1423.9	1439.3	1592.5	1592.5	1241.1
55°	752.4	770.3	879.7	1057.6	1221.3	1342.4	1473.3	1527.7	1714.2	1716.7	1324.4
57.5°	609.7	620.8	674.6	856.8	1090.3	1311.5	1532.0	1603.7	1815.6	1826.7	1431.9
60°	494.8	501.0	536.2	662.8	909.3	1228.1	1574.0	1712.4	1960.1	1975.6	1569.1
62.5°	397.8	404.0	427.5	503.5	713.5	1071.8	1566.6	1825.4	2152.8	2178.2	1748.8
65°	317.5	324.3	339.8	386.7	528.8	877.8	1490.6	1883.5	2352.4	2377.1	1868.1
67.5°	247.7	253.9	264.4	295.3	372.5	656.7	1310.9	1822.4	2441.9	2463.0	1874.2
70°	187.2	190.3	198.9	218.7	266.2	436.1	1026.1	1617.3	2361.6	2380.8	1750.7
72.5°	145.2	144.6	149.5	159.4	185.9	300.2	680.1	1315.2	2088.0	2107.7	1493.7
75°	118.6	118.0	121.1	124.2	134.7	201.4	401.5	990.2	1685.2	1647.5	1120.6
77.5°	100.1	99.5	102.5	103.2	107.5	139.0	228.6	651.7	1124.3	1059.4	631.3
80°	84.6	84.0	87.7	89.0	92.0	101.9	131.6	352.7	564.6	535.0	301.5
82.5°	63.6	66.1	72.9	76.0	79.7	75.4	81.5	155.7	261.9	250.2	131.0
85°	30.9	36.4	55.0	61.2	65.5	47.6	55.6	73.5	118.0	112.4	53.1
87.5°	10.5	9.3	32.7	38.9	42.6	21.6	30.9	40.8	48.8	44.5	16.7
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°	292.8	292.8	292.8	292.8	292.8	292.8	292.8	292.8	292.8	292.8	292.8
2.5°	295.9	286.6	273.0	262.5	255.7	250.2	247.7	247.1	245.9	245.2	245.2
5°	302.1	285.4	264.4	253.3	250.2	247.7	249.0	249.6	249.6	249.6	249.6
7.5°	311.3	287.9	262.5	255.1	254.5	254.5	258.2	260.1	261.3	261.3	261.3
10°	323.7	292.2	265.6	259.5	261.3	262.5	266.9	269.3	270.6	271.2	271.8
12.5°	340.4	301.5	271.8	266.9	269.3	270.0	273.0	274.3	275.5	276.1	276.1
15°	362.6	315.1	281.7	275.5	276.1	275.5	275.5	274.3	273.7	273.7	274.9
17.5°	385.5	328.0	290.3	281.7	279.2	274.3	270.6	267.5	265.6	264.4	265.0
20°	408.3	339.8	295.3	282.9	276.1	268.1	261.3	257.0	254.5	252.0	253.3
22.5°	431.2	350.9	297.1	279.2	269.3	257.6	250.2	243.4	237.8	234.1	234.7
25°	456.5	363.2	297.1	274.9	260.1	247.7	238.4	227.3	219.3	216.2	217.4
27.5°	481.8	373.7	294.0	266.9	249.6	237.2	223.6	210.7	205.7	203.9	204.5
30°	507.2	381.8	287.3	257.0	238.4	224.9	206.9	198.3	192.1	187.2	187.8
32.5°	532.5	387.3	278.0	244.6	226.7	209.4	194.6	184.7	173.6	167.4	168.0
35°	561.5	391.7	266.9	232.3	213.7	195.8	184.7	168.6	156.9	152.0	150.7
37.5°	591.8	394.7	255.1	218.7	200.8	185.9	174.8	155.1	143.9	137.1	136.5
40°	624.5	396.0	240.9	204.5	188.4	179.8	161.8	147.0	127.9	123.5	123.5
42.5°	663.5	395.4	226.7	190.3	174.8	165.6	152.6	145.8	129.1	124.8	122.3
45°	707.9	395.4	211.3	173.6	161.2	147.6	142.1	137.8	126.6	128.5	129.7
47.5°	758.6	394.1	192.7	160.0	150.1	138.4	135.3	126.0	121.7	122.9	124.2
50°	828.4	396.0	176.1	148.9	142.1	132.2	128.5	123.5	121.7	122.3	121.7
52.5°	925.4	389.8	160.0	142.1	135.9	122.9	122.9	122.3	122.9	122.3	122.3
55°	978.5	376.2	148.3	138.4	131.6	118.6	121.1	122.3	123.5	122.9	122.9
57.5°	1053.9	366.9	139.0	135.9	129.1	117.4	119.8	122.3	122.9	122.3	122.3
60°	1142.8	360.8	132.8	136.5	127.3	117.4	120.5	122.3	121.7	121.1	121.1
62.5°	1246.0	358.3	128.5	138.4	125.4	118.0	120.5	122.3	119.8	119.2	119.2
65°	1284.9	336.1	122.9	139.6	126.6	118.0	119.8	120.5	117.4	116.8	116.1
67.5°	1225.0	297.8	114.9	137.1	130.3	118.0	118.0	117.4	113.7	113.0	111.8
70°	1090.9	247.1	102.5	129.1	132.8	118.6	115.5	112.4	108.7	108.7	106.3
72.5°	893.3	194.6	86.5	114.9	131.0	120.5	110.6	106.3	101.9	101.9	99.5
75°	643.7	145.2	69.2	95.8	122.9	119.8	104.4	98.8	93.9	93.3	90.2
77.5°	366.9	101.9	56.2	74.7	109.3	116.8	98.8	90.2	84.6	82.8	80.9
80°	188.4	68.6	45.7	58.7	90.8	108.1	94.5	80.3	74.1	71.0	68.0
82.5°	89.6	45.7	35.2	43.2	68.6	94.5	89.0	69.2	62.4	58.7	55.0
85°	40.2	27.2	23.5	27.8	48.8	73.5	78.5	56.8	48.8	61.2	45.1
87.5°	13.0	12.4	12.4	13.0	23.5	32.1	57.5	42.0	38.9	32.1	27.2
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)