

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: P214574

Luminaire Tested: **ARCH-AF24-30-D-U-T2R-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214574  
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-AF24-30-D-U-T2R-7030  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3543 lumens  
Efficiency: N/A  
Efficacy: 114.3 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

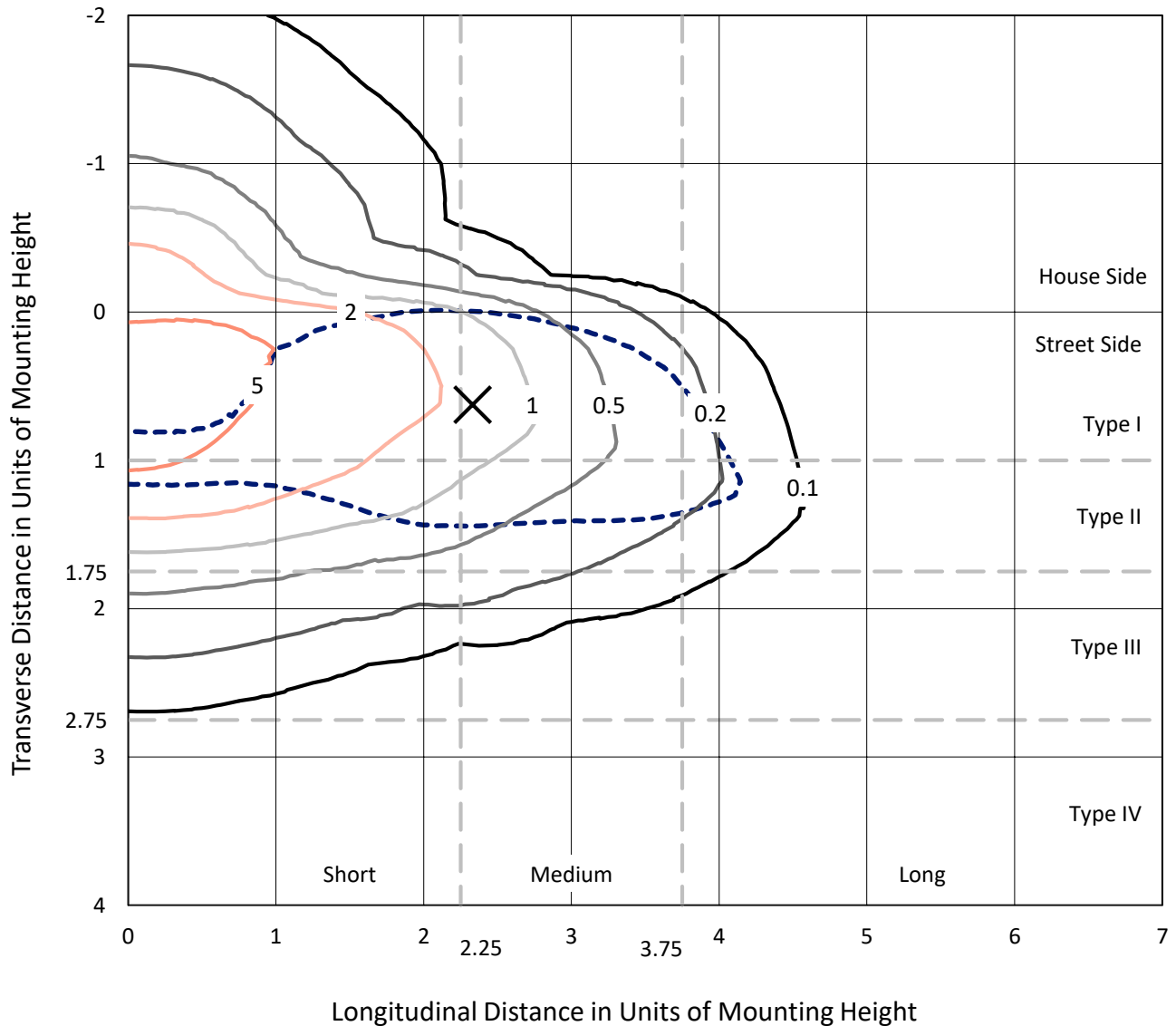
Input Watts (W): 31  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

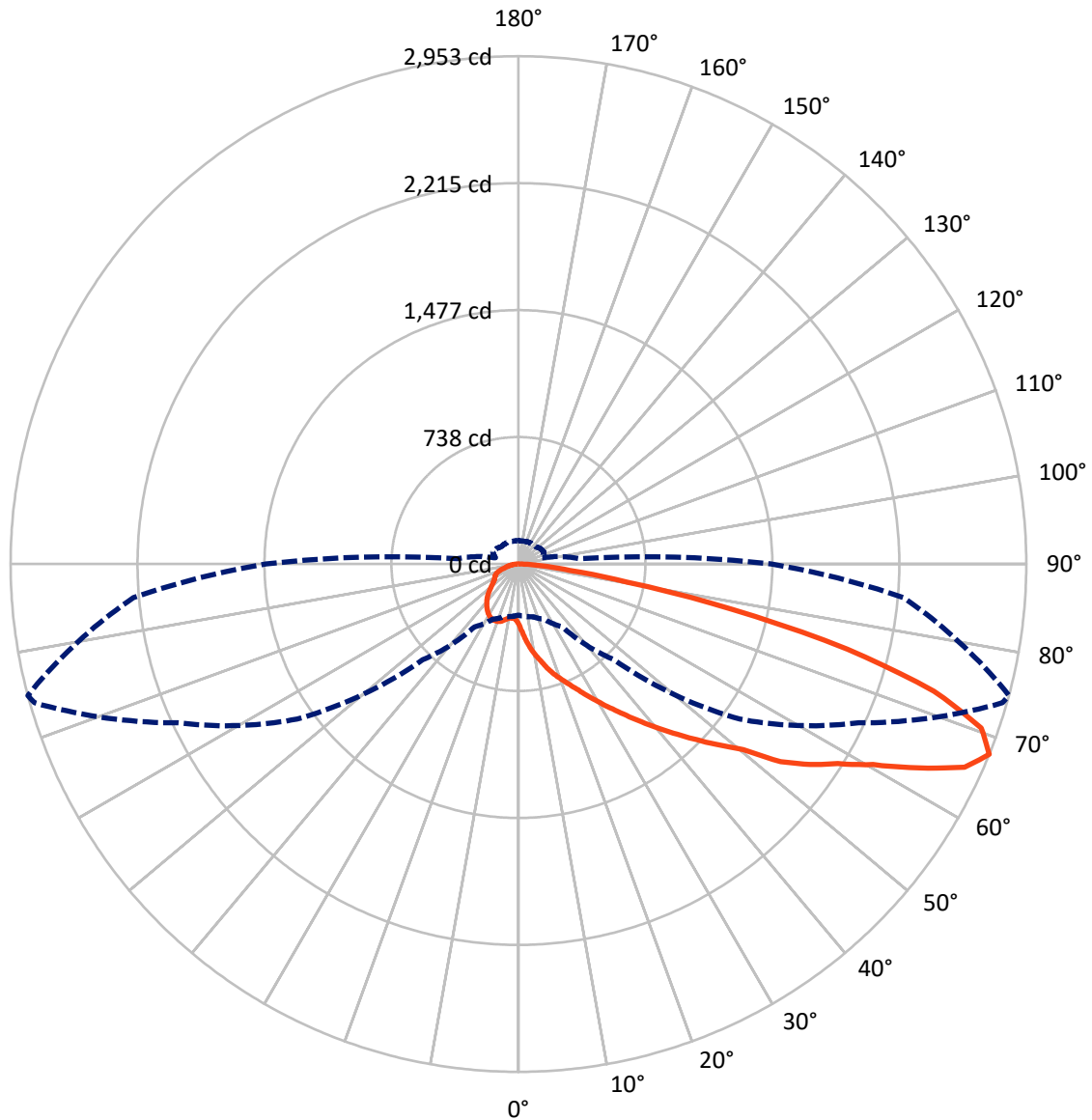
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.3 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
<b>House Side</b>	Lumens	605.0	0.0	605.0
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	2938.0	0.0	2938.0
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	3543.0	0.0	3543.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.2	1.2
10°-20°	149.1	4.2
20°-30°	271.9	7.7
30°-40°	446.2	12.6
40°-50°	645.3	18.2
50°-60°	760.5	21.5
60°-70°	739.0	20.9
70°-80°	410.8	11.6
80°-90°	79.0	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°	3543.0	100.0
0°-180°	3543.0	100.0



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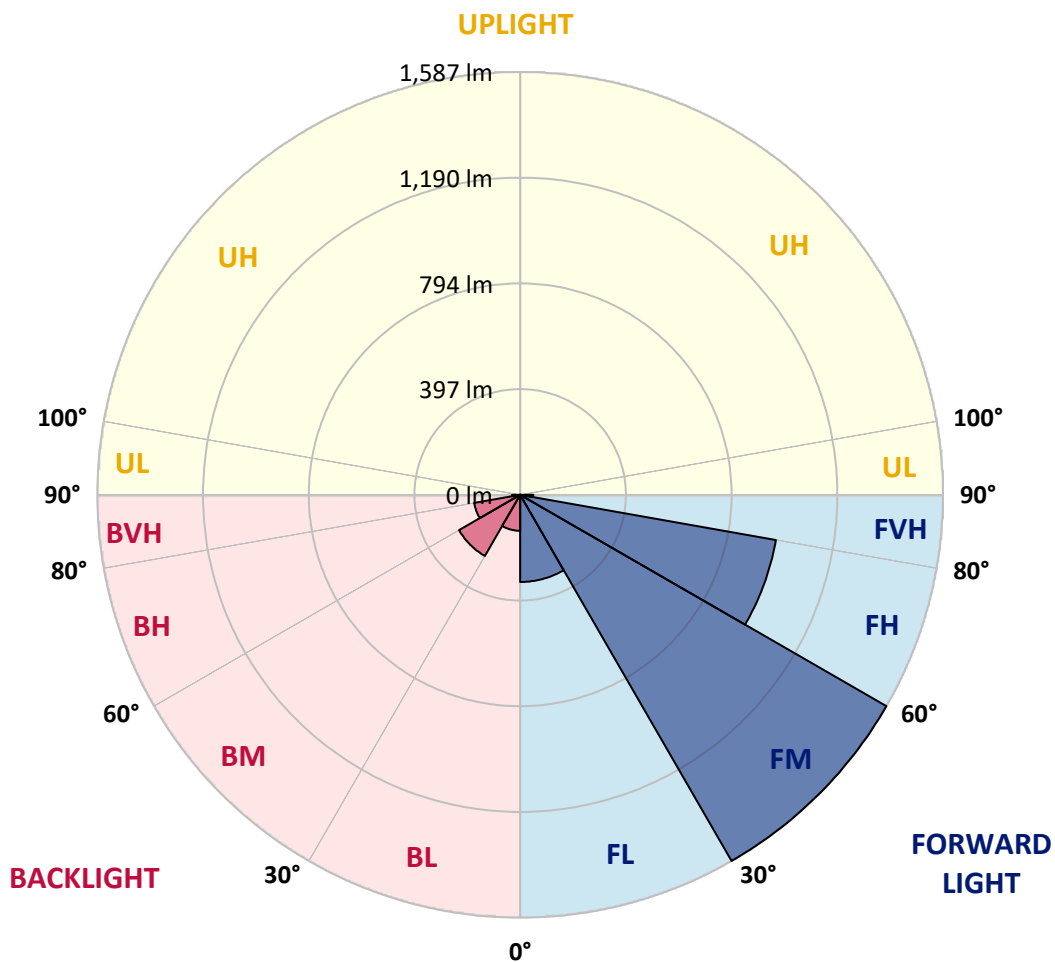
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	327.1	9.2			
FM (30°-60°)	1587.1	44.8			
FH (60°-80°)	974.6	27.5			G1/1800
FVH (80°-90°)	49.2	1.4			G1/100
BL (0°-30°)	135.0	3.8	B1/500		
BM (30°-60°)	265.0	7.5	B1/1000		
BH (60°-80°)	175.2	4.9	B1/500		G1/500
BVH (80°-90°)	29.8	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°	351.1	351.1	351.1	351.1	351.1	351.1	351.1	351.1	351.1	351.1	351.1
2.5°	497.7	499.2	496.2	489.6	480.0	462.2	446.6	419.2	394.8	391.8	365.9
5°	585.1	586.6	582.9	574.8	564.4	545.1	523.7	488.1	448.8	441.4	386.6
7.5°	645.1	645.9	641.4	633.3	625.1	605.9	584.4	544.4	496.2	490.3	413.3
10°	696.2	697.7	691.8	686.6	677.7	658.5	636.2	594.0	544.4	536.2	440.7
12.5°	743.6	745.1	741.4	737.0	734.0	716.2	691.8	641.4	588.1	579.2	473.3
15°	775.5	777.0	777.7	783.6	787.3	774.7	750.3	695.5	635.5	627.3	511.8
17.5°	766.6	770.3	781.4	802.9	825.8	826.6	806.6	748.8	682.2	673.3	551.1
20°	740.7	743.6	757.0	789.6	834.7	860.7	859.2	802.9	725.9	716.2	587.3
22.5°	762.1	765.9	765.9	785.8	830.3	878.4	897.7	856.2	769.6	760.7	623.6
25°	854.0	856.2	840.7	832.5	848.8	893.2	929.5	914.0	822.9	812.5	662.9
27.5°	982.1	978.4	959.2	926.6	908.8	920.7	957.7	968.8	884.4	871.8	703.6
30°	1109.5	1107.3	1085.1	1041.4	1001.4	976.2	988.8	1017.7	951.0	936.2	742.9
32.5°	1228.8	1225.1	1200.6	1149.5	1104.3	1057.7	1033.2	1062.1	1022.1	1005.1	786.6
35°	1338.4	1328.8	1304.3	1251.0	1204.3	1159.9	1099.9	1104.3	1099.2	1081.4	834.7
37.5°	1427.3	1419.9	1393.2	1343.6	1293.9	1251.7	1188.8	1152.5	1182.1	1165.1	890.3
40°	1505.8	1497.6	1470.2	1420.6	1374.7	1334.7	1285.1	1211.0	1275.4	1256.2	952.5
42.5°	1565.0	1559.1	1536.9	1488.0	1443.6	1407.3	1382.8	1285.1	1372.5	1353.9	1020.6
45°	1596.9	1591.0	1579.1	1539.8	1499.1	1471.0	1473.2	1373.2	1473.9	1458.4	1101.4
47.5°	1557.6	1562.1	1572.4	1565.0	1539.8	1526.5	1553.9	1464.3	1587.3	1572.4	1188.8
50°	1452.4	1456.9	1498.4	1549.5	1558.4	1574.7	1626.5	1569.5	1707.2	1695.4	1296.9
52.5°	1194.0	1218.4	1333.2	1455.4	1539.1	1606.5	1707.2	1725.8	1909.4	1909.4	1488.0
55°	902.1	923.6	1054.7	1268.0	1464.3	1609.5	1766.5	1831.7	2055.4	2058.3	1588.0
57.5°	731.0	744.4	808.8	1027.3	1307.3	1572.4	1836.9	1922.8	2176.8	2190.2	1716.9
60°	593.3	600.7	642.9	794.7	1090.3	1472.4	1887.2	2053.1	2350.1	2368.7	1881.3
62.5°	477.0	484.4	512.5	603.6	855.5	1285.1	1878.3	2188.7	2581.2	2611.6	2096.8
65°	380.7	388.9	407.4	463.7	634.0	1052.5	1787.2	2258.3	2820.5	2850.1	2239.8
67.5°	297.0	304.4	317.0	354.0	446.6	787.3	1571.7	2185.0	2927.9	2953.0	2247.2
70°	224.4	228.1	238.5	262.2	319.2	522.9	1230.2	1939.1	2831.6	2854.5	2099.1
72.5°	174.1	173.3	179.2	191.1	222.9	360.0	815.5	1576.9	2503.5	2527.2	1790.9
75°	142.2	141.5	145.2	148.9	161.5	241.5	481.4	1187.3	2020.5	1975.4	1343.6
77.5°	120.0	119.2	123.0	123.7	128.9	166.7	274.0	781.4	1348.0	1270.2	757.0
80°	101.5	100.7	105.2	106.7	110.4	122.2	157.8	422.9	677.0	641.4	361.4
82.5°	76.3	79.3	87.4	91.1	95.5	90.4	97.8	186.6	314.0	300.0	157.0
85°	37.0	43.7	65.9	73.3	78.5	57.0	66.7	88.1	141.5	134.8	63.7
87.5°	12.6	11.1	39.3	46.7	51.1	25.9	37.0	48.9	58.5	53.3	20.0
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°	351.1	351.1	351.1	351.1	351.1	351.1	351.1	351.1	351.1	351.1	351.1
2.5°	354.8	343.7	327.4	314.8	306.6	300.0	297.0	296.3	294.8	294.0	294.0
5°	362.2	342.2	317.0	303.7	300.0	297.0	298.5	299.2	299.2	299.2	299.2
7.5°	373.3	345.2	314.8	305.9	305.2	305.2	309.6	311.8	313.3	313.3	313.3
10°	388.1	350.3	318.5	311.1	313.3	314.8	320.0	322.9	324.4	325.2	325.9
12.5°	408.1	361.4	325.9	320.0	322.9	323.7	327.4	328.9	330.3	331.1	331.1
15°	434.8	377.7	337.7	330.3	331.1	330.3	330.3	328.9	328.1	328.1	329.6
17.5°	462.2	393.3	348.1	337.7	334.8	328.9	324.4	320.7	318.5	317.0	317.7
20°	489.6	407.4	354.0	339.2	331.1	321.4	313.3	308.1	305.2	302.2	303.7
22.5°	517.0	420.7	356.3	334.8	322.9	308.9	300.0	291.8	285.2	280.7	281.5
25°	547.4	435.5	356.3	329.6	311.8	297.0	285.9	272.6	262.9	259.2	260.7
27.5°	577.7	448.1	352.6	320.0	299.2	284.4	268.1	252.6	246.6	244.4	245.2
30°	608.1	457.7	344.4	308.1	285.9	269.6	248.1	237.8	230.3	224.4	225.2
32.5°	638.5	464.4	333.3	293.3	271.8	251.1	233.3	221.5	208.1	200.7	201.5
35°	673.3	469.6	320.0	278.5	256.3	234.8	221.5	202.2	188.1	182.2	180.7
37.5°	709.6	473.3	305.9	262.2	240.7	222.9	209.6	185.9	172.6	164.4	163.7
40°	748.8	474.8	288.9	245.2	225.9	215.5	194.1	176.3	153.3	148.1	148.1
42.5°	795.5	474.0	271.8	228.1	209.6	198.5	182.9	174.8	154.8	149.6	146.7
45°	848.8	474.0	253.3	208.1	193.3	177.0	170.4	165.2	151.8	154.1	155.5
47.5°	909.5	472.5	231.1	191.8	180.0	165.9	162.2	151.1	145.9	147.4	148.9
50°	993.2	474.8	211.1	178.5	170.4	158.5	154.1	148.1	145.9	146.7	145.9
52.5°	1109.5	467.4	191.8	170.4	162.9	147.4	147.4	146.7	147.4	146.7	146.7
55°	1173.2	451.1	177.8	165.9	157.8	142.2	145.2	146.7	148.1	147.4	147.4
57.5°	1263.6	440.0	166.7	162.9	154.8	140.7	143.7	146.7	147.4	146.7	146.7
60°	1370.2	432.6	159.2	163.7	152.6	140.7	144.4	146.7	145.9	145.2	145.2
62.5°	1493.9	429.6	154.1	165.9	150.4	141.5	144.4	146.7	143.7	142.9	142.9
65°	1540.6	402.9	147.4	167.4	151.8	141.5	143.7	144.4	140.7	140.0	139.2
67.5°	1468.7	357.0	137.8	164.4	156.3	141.5	141.5	140.7	136.3	135.5	134.1
70°	1308.0	296.3	123.0	154.8	159.2	142.2	138.5	134.8	130.4	130.4	127.4
72.5°	1071.0	233.3	103.7	137.8	157.0	144.4	132.6	127.4	122.2	122.2	119.2
75°	771.8	174.1	83.0	114.8	147.4	143.7	125.2	118.5	112.6	111.8	108.1
77.5°	440.0	122.2	67.4	89.6	131.1	140.0	118.5	108.1	101.5	99.2	97.0
80°	225.9	82.2	54.8	70.4	108.9	129.6	113.3	96.3	88.9	85.2	81.5
82.5°	107.4	54.8	42.2	51.8	82.2	113.3	106.7	83.0	74.8	70.4	65.9
85°	48.1	32.6	28.1	33.3	58.5	88.1	94.1	68.1	58.5	73.3	54.1
87.5°	15.6	14.8	14.8	15.6	28.1	38.5	68.9	50.4	46.7	38.5	32.6
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)