

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: P214597

Luminaire Tested: **ARCH-AF16-30-D-U-T2R-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214597
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-7050
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 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: 3803 lumens
Efficiency: N/A
Efficacy: 118.8 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

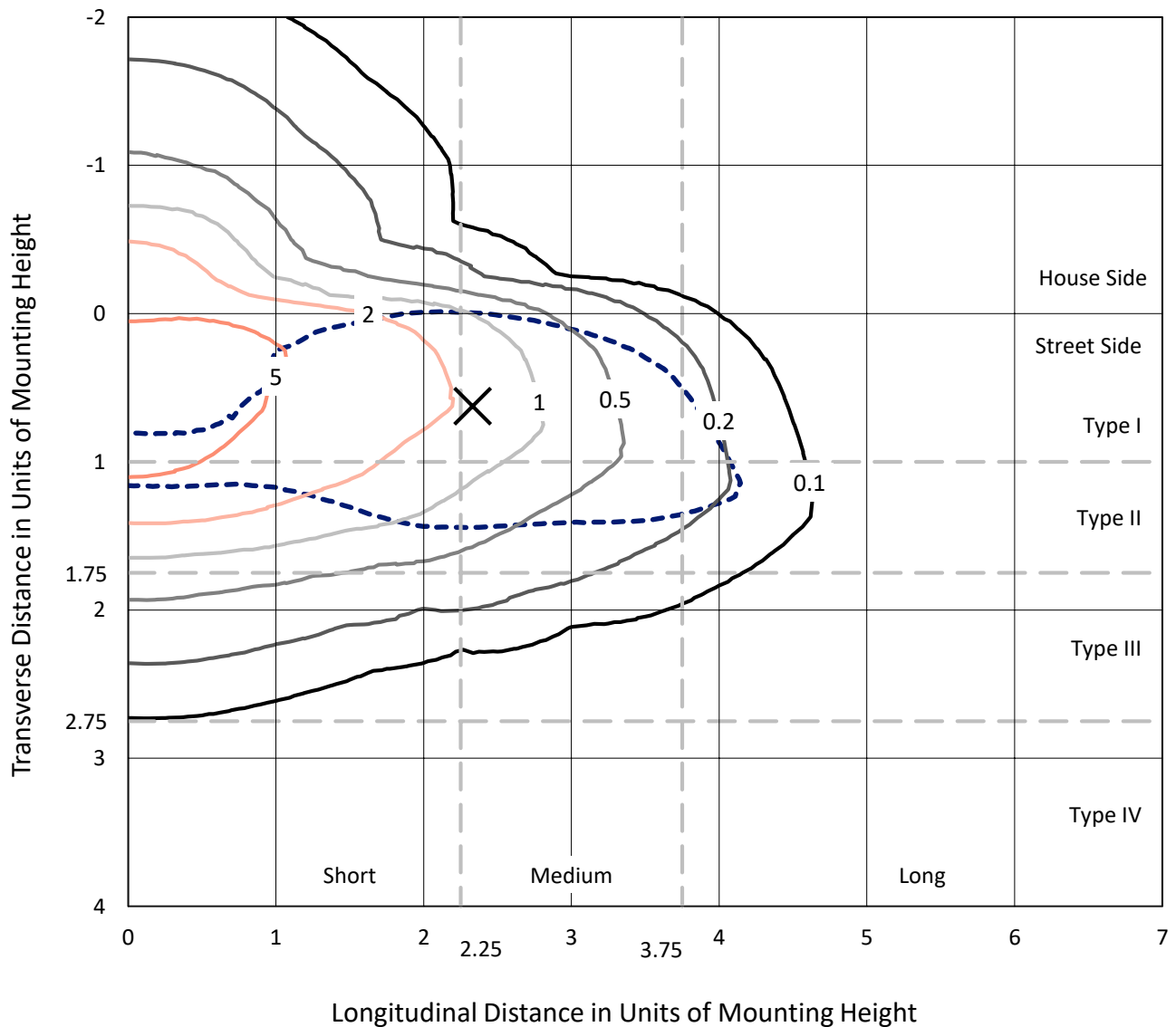
Input Watts (W): 32
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P214597
 CATALOG NUMBER: ARCH-AF16-30-D-U-T2R-7050

Iso-Footcandle Lines of Horizontal Illumination

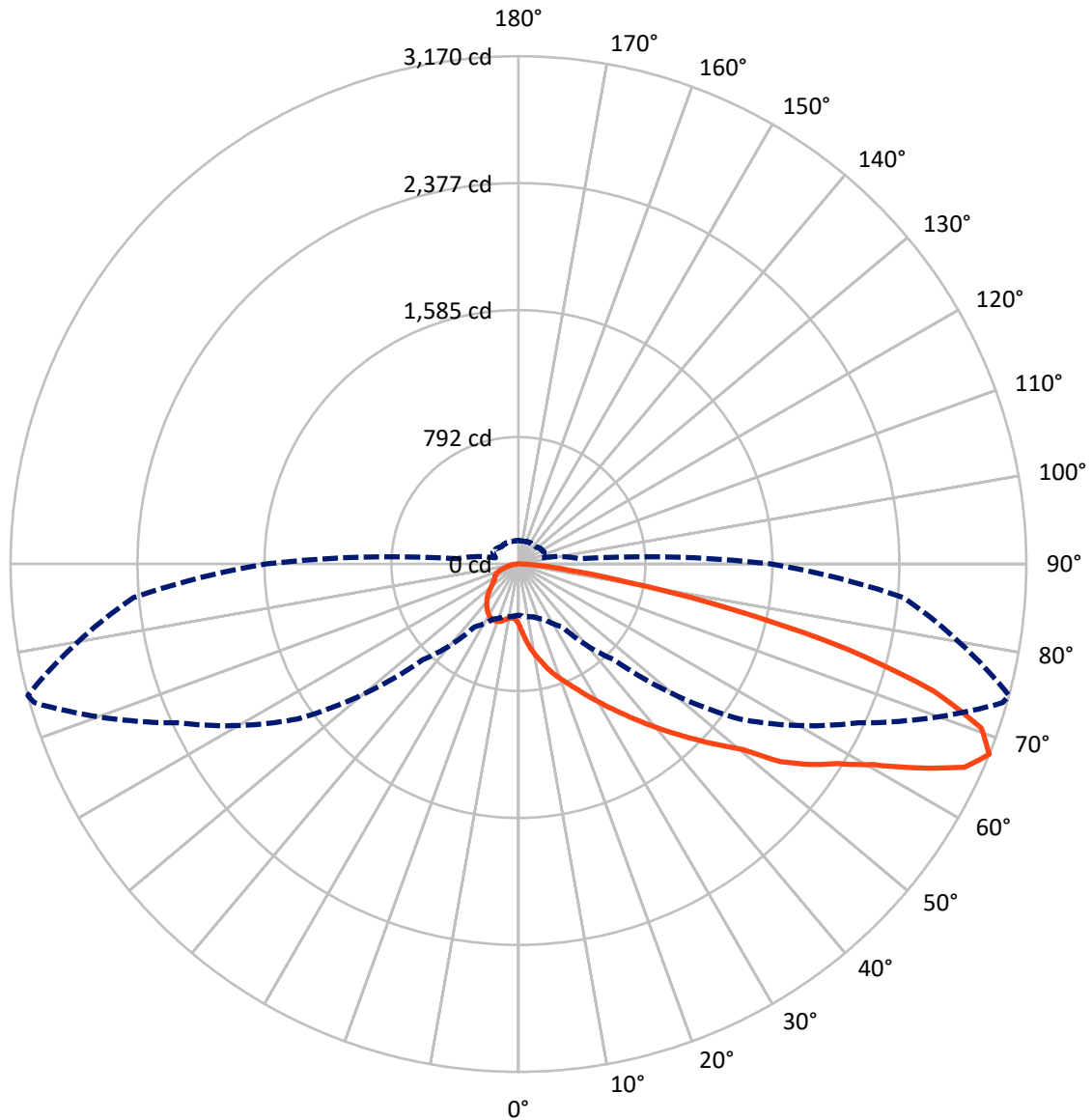
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.9 fc
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P214597
CATALOG NUMBER: ARCH-AF16-30-D-U-T2R-7050

Luminous Intensity Polar Plot



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

REPORT NUMBER: P214597

CATALOG NUMBER: ARCH-AF16-30-D-U-T2R-7050

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	649.4	0.0	649.4
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	3153.6	0.0	3153.6
	% Fixture	82.9	0.0	82.9
Total	Lumens	3803.0	0.0	3803.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.3	1.2
10°-20°	160.0	4.2
20°-30°	291.8	7.7
30°-40°	479.0	12.6
40°-50°	692.7	18.2
50°-60°	816.3	21.5
60°-70°	793.3	20.9
70°-80°	440.9	11.6
80°-90°	84.8	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°	3803.0	100.0
0°-180°	3803.0	100.0



REPORT NUMBER: P214597

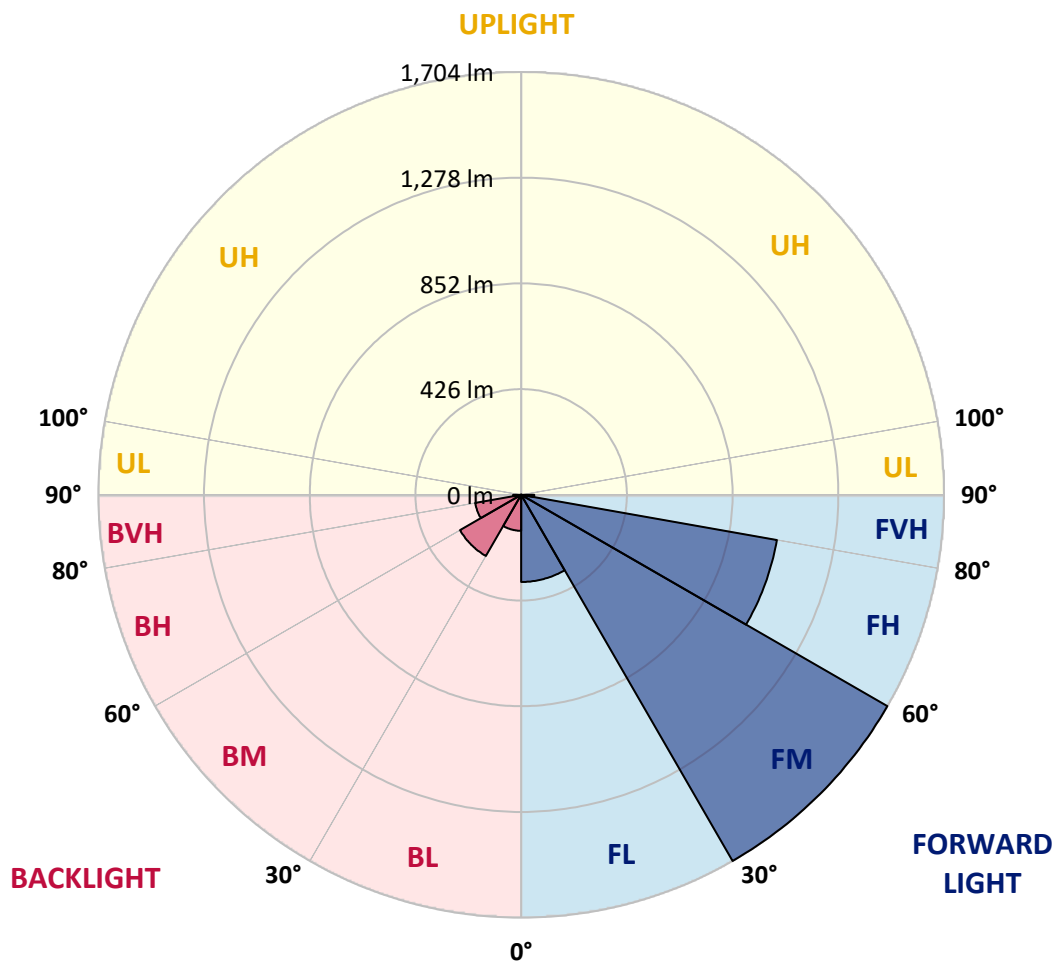
CATALOG NUMBER: ARCH-AF16-30-D-U-T2R-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	351.1	9.2			
FM	(30°-60°)	1703.5	44.8			
FH	(60°-80°)	1046.2	27.5			G1/1800
FVH	(80°-90°)	52.8	1.4			G1/100
BL	(0°-30°)	144.9	3.8	B1/500		
BM	(30°-60°)	284.4	7.5	B1/1000		
BH	(60°-80°)	188.0	4.9	B1/500		G1/500
BVH	(80°-90°)	32.0	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





REPORT NUMBER: P214597

CATALOG NUMBER: ARCH-AF16-30-D-U-T2R-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	376.8	376.8	376.8	376.8	376.8	376.8	376.8	376.8	376.8	376.8	376.8
2.5°	534.3	535.8	532.7	525.5	515.2	496.1	479.4	450.0	423.7	420.6	392.7
5°	628.1	629.7	625.7	616.9	605.8	585.1	562.1	523.9	481.8	473.8	415.0
7.5°	692.5	693.3	688.5	679.7	671.0	650.3	627.3	584.3	532.7	526.3	443.6
10°	747.3	748.9	742.5	737.0	727.4	706.8	682.9	637.6	584.3	575.6	473.0
12.5°	798.2	799.8	795.8	791.0	787.9	768.8	742.5	688.5	631.2	621.7	508.0
15°	832.4	834.0	834.8	841.1	845.1	831.6	805.4	746.5	682.1	673.4	549.4
17.5°	822.8	826.8	838.7	861.8	886.4	887.2	865.8	803.8	732.2	722.7	591.5
20°	795.0	798.2	812.5	847.5	896.0	923.8	922.2	861.8	779.1	768.8	630.5
22.5°	818.1	822.1	822.1	843.5	891.2	942.9	963.6	919.0	826.0	816.5	669.4
25°	916.7	919.0	902.3	893.6	911.1	958.8	997.8	981.1	883.3	872.1	711.5
27.5°	1054.2	1050.2	1029.6	994.6	975.5	988.2	1028.0	1039.9	949.3	935.7	755.3
30°	1190.9	1188.6	1164.7	1117.8	1074.9	1047.8	1061.4	1092.4	1020.8	1004.9	797.4
32.5°	1318.9	1315.0	1288.7	1233.9	1185.4	1135.3	1109.1	1140.1	1097.1	1078.8	844.3
35°	1436.6	1426.3	1400.0	1342.8	1292.7	1245.0	1180.6	1185.4	1179.8	1160.7	896.0
37.5°	1532.0	1524.1	1495.4	1442.2	1388.9	1343.6	1276.0	1237.1	1268.9	1250.6	955.6
40°	1616.3	1607.5	1578.1	1524.9	1475.6	1432.6	1379.4	1299.9	1369.0	1348.4	1022.4
42.5°	1679.9	1673.5	1649.7	1597.2	1549.5	1510.5	1484.3	1379.4	1473.2	1453.3	1095.5
45°	1714.1	1707.7	1695.0	1652.8	1609.1	1578.9	1581.3	1474.0	1582.1	1565.4	1182.2
47.5°	1671.9	1676.7	1687.8	1679.9	1652.8	1638.5	1668.0	1571.8	1703.7	1687.8	1276.0
50°	1559.0	1563.8	1608.3	1663.2	1672.7	1690.2	1745.9	1684.6	1832.5	1819.8	1392.1
52.5°	1281.6	1307.8	1431.0	1562.2	1652.1	1724.4	1832.5	1852.4	2049.6	2049.6	1597.2
55°	968.3	991.4	1132.1	1361.1	1571.8	1727.6	1896.1	1966.1	2206.2	2209.4	1704.5
57.5°	784.7	799.0	868.2	1102.7	1403.2	1687.8	1971.7	2063.9	2336.6	2350.9	1842.9
60°	636.8	644.8	690.1	853.1	1170.3	1580.5	2025.7	2203.8	2522.6	2542.5	2019.4
62.5°	512.0	519.9	550.2	647.9	918.2	1379.4	2016.2	2349.3	2770.6	2803.2	2250.7
65°	408.6	417.4	437.3	497.7	680.5	1129.7	1918.4	2424.0	3027.4	3059.2	2404.1
67.5°	318.8	326.8	340.3	380.0	479.4	845.1	1687.0	2345.3	3142.7	3169.7	2412.1
70°	240.9	244.9	256.0	281.4	342.7	561.3	1320.5	2081.4	3039.4	3064.0	2253.1
72.5°	186.8	186.0	192.4	205.1	239.3	386.4	875.3	1692.6	2687.2	2712.6	1922.4
75°	152.6	151.8	155.8	159.8	173.3	259.2	516.8	1274.4	2168.8	2120.3	1442.2
77.5°	128.8	128.0	132.0	132.8	138.3	178.9	294.2	838.7	1446.9	1363.5	812.5
80°	108.9	108.1	112.9	114.5	118.5	131.2	169.3	454.0	726.6	688.5	388.0
82.5°	81.9	85.1	93.8	97.8	102.6	97.0	104.9	200.3	337.1	322.0	168.5
85°	39.8	46.9	70.8	78.7	84.3	61.2	71.6	94.6	151.8	144.7	68.4
87.5°	13.5	11.9	42.1	50.1	54.9	27.8	39.8	52.5	62.8	57.2	21.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P214597

CATALOG NUMBER: ARCH-AF16-30-D-U-T2R-7050

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	376.8	376.8	376.8	376.8	376.8	376.8	376.8	376.8	376.8	376.8	376.8
2.5°	380.8	368.9	351.4	337.9	329.1	322.0	318.8	318.0	316.4	315.6	315.6
5°	388.8	367.3	340.3	326.0	322.0	318.8	320.4	321.2	321.2	321.2	321.2
7.5°	400.7	370.5	337.9	328.3	327.5	327.5	332.3	334.7	336.3	336.3	336.3
10°	416.6	376.0	341.9	333.9	336.3	337.9	343.4	346.6	348.2	349.0	349.8
12.5°	438.1	388.0	349.8	343.4	346.6	347.4	351.4	353.0	354.6	355.4	355.4
15°	466.7	405.5	362.5	354.6	355.4	354.6	354.6	353.0	352.2	352.2	353.8
17.5°	496.1	422.2	373.7	362.5	359.3	353.0	348.2	344.2	341.9	340.3	341.1
20°	525.5	437.3	380.0	364.1	355.4	345.0	336.3	330.7	327.5	324.4	326.0
22.5°	554.9	451.6	382.4	359.3	346.6	331.5	322.0	313.2	306.1	301.3	302.1
25°	587.5	467.5	382.4	353.8	334.7	318.8	306.9	292.6	282.2	278.3	279.8
27.5°	620.1	481.0	378.4	343.4	321.2	305.3	287.8	271.1	264.7	262.4	263.2
30°	652.7	491.3	369.7	330.7	306.9	289.4	266.3	255.2	247.3	240.9	241.7
32.5°	685.3	498.5	357.8	314.8	291.8	269.5	250.4	237.7	223.4	215.5	216.2
35°	722.7	504.0	343.4	298.9	275.1	252.0	237.7	217.0	201.9	195.6	194.0
37.5°	761.6	508.0	328.3	281.4	258.4	239.3	225.0	199.6	185.2	176.5	175.7
40°	803.8	509.6	310.1	263.2	242.5	231.4	208.3	189.2	164.6	159.0	159.0
42.5°	853.9	508.8	291.8	244.9	225.0	213.1	196.4	187.6	166.2	160.6	157.4
45°	911.1	508.8	271.9	223.4	207.5	190.0	182.9	177.3	163.0	165.4	167.0
47.5°	976.3	507.2	248.0	205.9	193.2	178.1	174.1	162.2	156.6	158.2	159.8
50°	1066.1	509.6	226.6	191.6	182.9	170.1	165.4	159.0	156.6	157.4	156.6
52.5°	1190.9	501.7	205.9	182.9	174.9	158.2	158.2	157.4	158.2	157.4	157.4
55°	1259.3	484.2	190.8	178.1	169.3	152.6	155.8	157.4	159.0	158.2	158.2
57.5°	1356.3	472.2	178.9	174.9	166.2	151.1	154.2	157.4	158.2	157.4	157.4
60°	1470.8	464.3	170.9	175.7	163.8	151.1	155.0	157.4	156.6	155.8	155.8
62.5°	1603.6	461.1	165.4	178.1	161.4	151.8	155.0	157.4	154.2	153.4	153.4
65°	1653.6	432.5	158.2	179.7	163.0	151.8	154.2	155.0	151.1	150.3	149.5
67.5°	1576.5	383.2	147.9	176.5	167.7	151.8	151.8	151.1	146.3	145.5	143.9
70°	1404.0	318.0	132.0	166.2	170.9	152.6	148.7	144.7	139.9	139.9	136.7
72.5°	1149.6	250.4	111.3	147.9	168.5	155.0	142.3	136.7	131.2	131.2	128.0
75°	828.4	186.8	89.0	123.2	158.2	154.2	134.4	127.2	120.8	120.0	116.1
77.5°	472.2	131.2	72.3	96.2	140.7	150.3	127.2	116.1	108.9	106.5	104.1
80°	242.5	88.2	58.8	75.5	116.9	139.1	121.6	103.4	95.4	91.4	87.5
82.5°	115.3	58.8	45.3	55.7	88.2	121.6	114.5	89.0	80.3	75.5	70.8
85°	51.7	35.0	30.2	35.8	62.8	94.6	101.0	73.1	62.8	78.7	58.0
87.5°	16.7	15.9	15.9	16.7	30.2	41.3	73.9	54.1	50.1	41.3	35.0
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)