

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: P214588

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214588
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
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 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: 4093.8 lumens
Efficiency: N/A
Efficacy: 132.1 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_{in}): 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

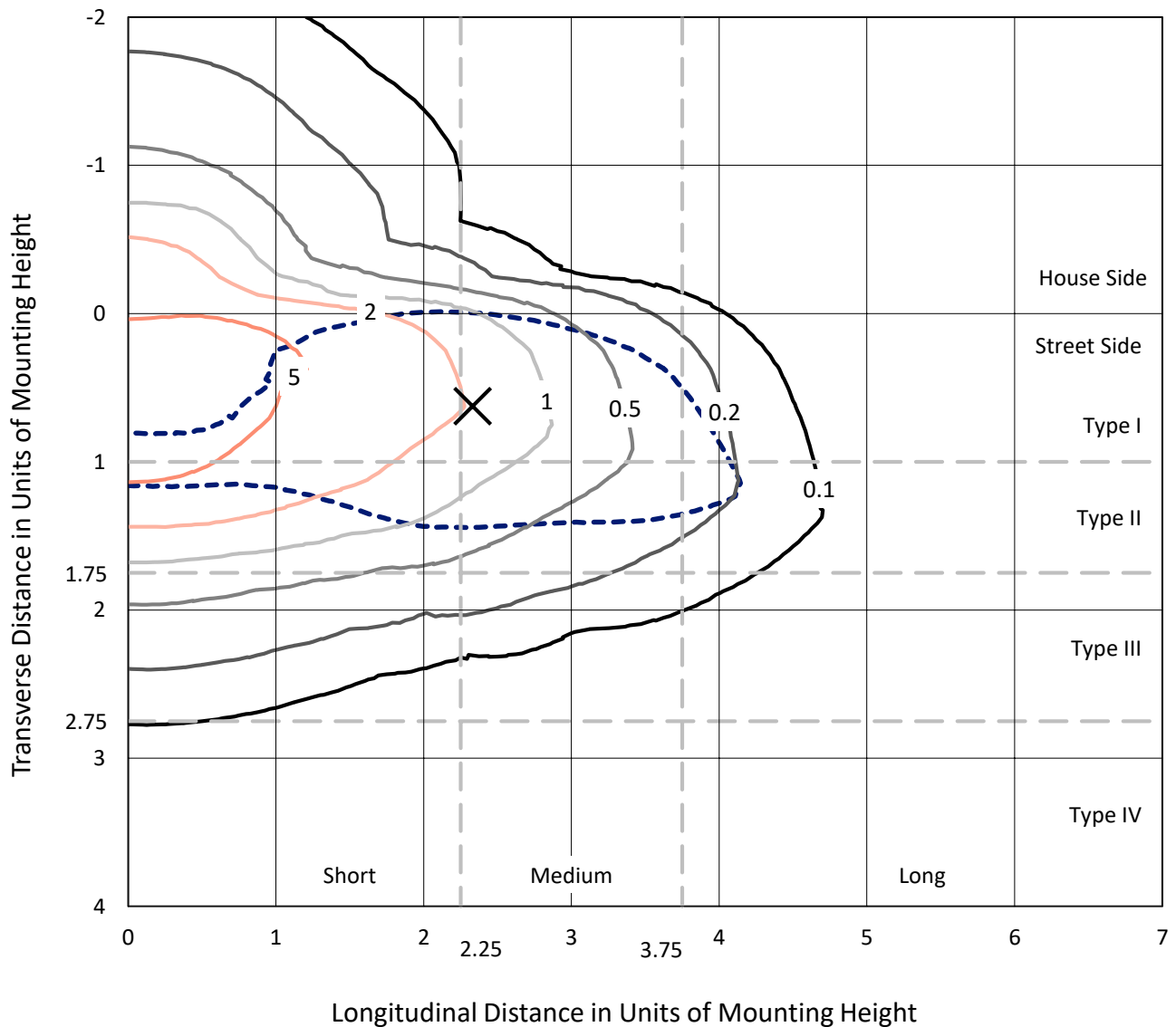


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

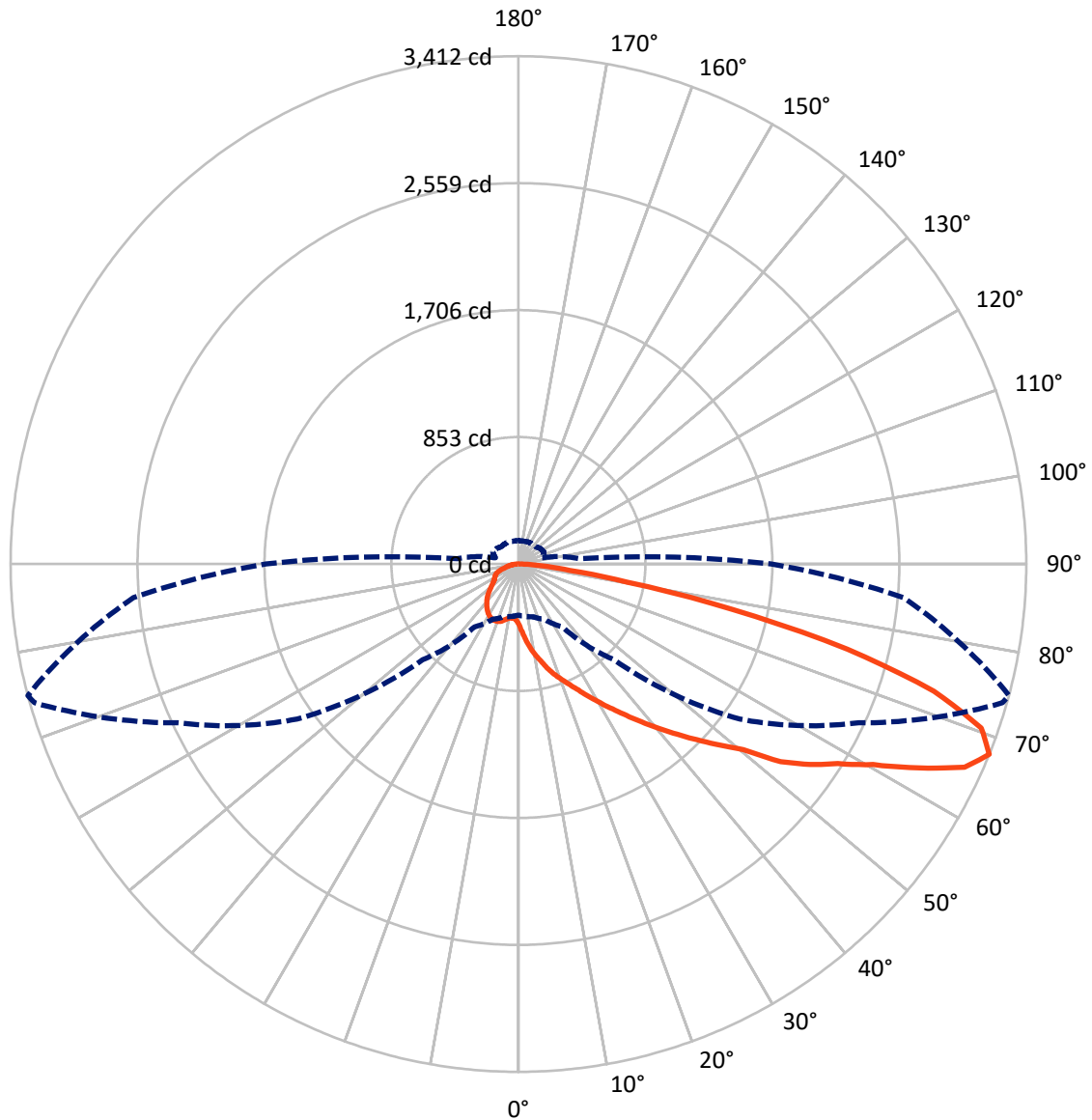


Based on 10 foot mounting height. Maximum calculated value = 8.5 fc
 Type II - Medium - Semi-Cutoff

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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	699.1	0.0	699.1
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	3394.8	0.0	3394.8
	% Fixture	82.9	0.0	82.9
Total	Lumens	4093.8	0.0	4093.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.7	1.2
10°-20°	172.2	4.2
20°-30°	314.1	7.7
30°-40°	515.6	12.6
40°-50°	745.6	18.2
50°-60°	878.7	21.5
60°-70°	853.9	20.9
70°-80°	474.7	11.6
80°-90°	91.3	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°	4093.8	100.0
0°-180°	4093.8	100.0



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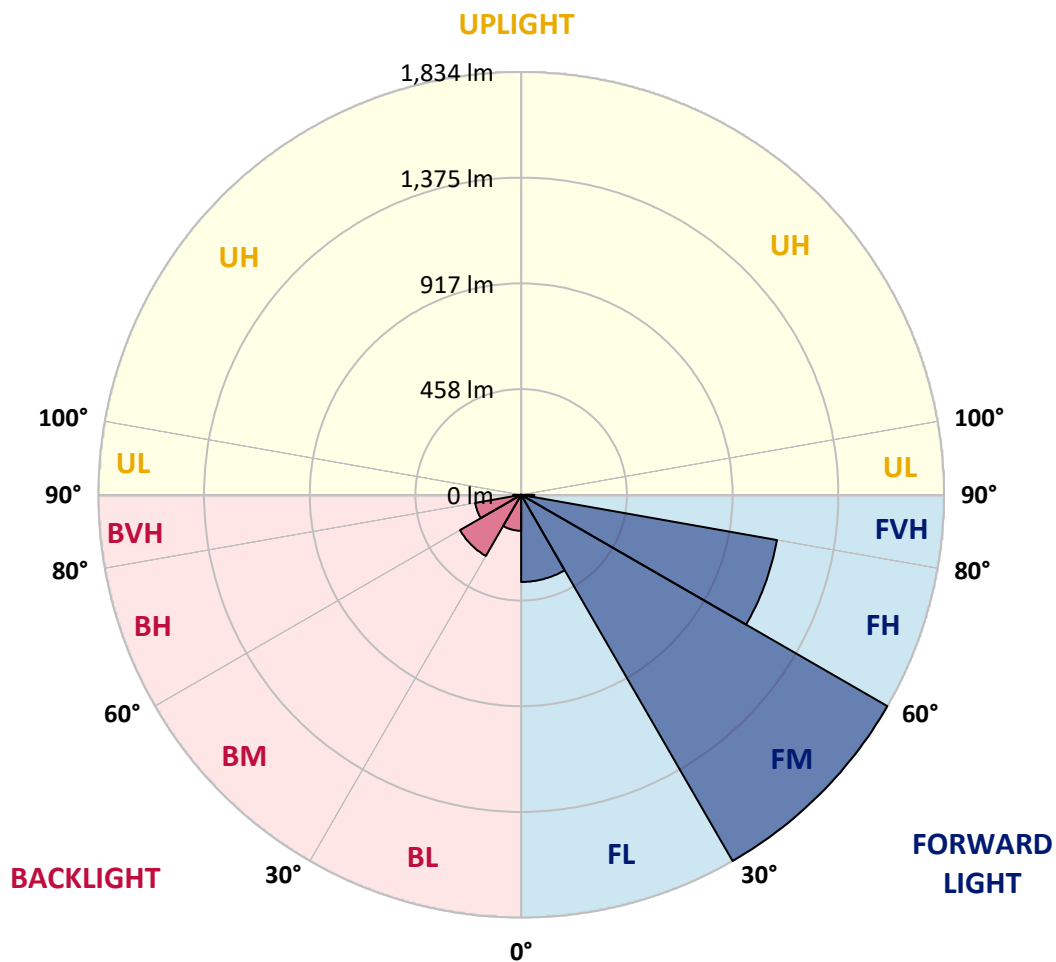
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	378.0	9.2			
FM (30°-60°)	1833.8	44.8			
FH (60°-80°)	1126.2	27.5			G1/1800
FVH (80°-90°)	56.8	1.4			G1/100
BL (0°-30°)	156.0	3.8	B1/500		
BM (30°-60°)	306.2	7.5	B1/1000		
BH (60°-80°)	202.4	4.9	B1/500		G1/500
BVH (80°-90°)	34.5	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°	405.7	405.7	405.7	405.7	405.7	405.7	405.7	405.7	405.7	405.7	405.7
2.5°	575.1	576.8	573.4	565.7	554.5	534.1	516.1	484.4	456.1	452.8	422.8
5°	676.1	677.8	673.5	664.1	652.1	629.9	605.1	564.0	518.6	510.0	446.7
7.5°	745.4	746.2	741.1	731.7	722.3	700.1	675.2	629.0	573.4	566.5	477.5
10°	804.4	806.2	799.3	793.3	783.1	760.9	735.2	686.4	629.0	619.6	509.2
12.5°	859.3	860.9	856.7	851.5	848.1	827.6	799.3	741.1	679.5	669.2	546.9
15°	896.0	897.7	898.7	905.4	909.7	895.2	867.0	803.6	734.3	724.9	591.4
17.5°	885.8	890.1	902.9	927.7	954.2	955.1	932.0	865.2	788.2	778.0	636.7
20°	855.8	859.3	874.6	912.3	964.5	994.5	992.8	927.7	838.7	827.6	678.6
22.5°	880.7	885.0	885.0	908.1	959.4	1015.0	1037.3	989.3	889.3	878.9	720.6
25°	986.7	989.3	971.4	962.0	980.8	1032.2	1074.1	1056.1	950.8	938.9	766.0
27.5°	1134.9	1130.6	1108.3	1070.6	1050.1	1063.8	1106.6	1119.4	1021.8	1007.3	813.0
30°	1282.1	1279.5	1253.8	1203.3	1157.1	1128.0	1142.5	1175.9	1098.9	1081.8	858.4
32.5°	1419.9	1415.6	1387.3	1328.2	1276.0	1222.1	1193.9	1227.2	1181.0	1161.4	908.9
35°	1546.5	1535.3	1507.1	1445.5	1391.5	1340.3	1270.9	1276.0	1270.0	1249.5	964.5
37.5°	1649.2	1640.6	1609.8	1552.4	1495.1	1446.4	1373.6	1331.7	1365.8	1346.2	1028.7
40°	1739.9	1730.5	1698.8	1641.4	1588.4	1542.2	1484.8	1399.3	1473.8	1451.5	1100.6
42.5°	1808.4	1801.5	1775.8	1719.4	1668.0	1626.1	1597.8	1484.8	1585.9	1564.4	1179.4
45°	1845.2	1838.3	1824.6	1779.2	1732.2	1699.6	1702.2	1586.7	1703.1	1685.1	1272.7
47.5°	1799.8	1804.9	1816.9	1808.4	1779.2	1763.9	1795.5	1692.0	1834.0	1816.9	1373.6
50°	1678.3	1683.4	1731.3	1790.4	1800.7	1819.5	1879.4	1813.5	1972.7	1959.0	1498.5
52.5°	1379.6	1407.8	1540.5	1681.7	1778.4	1856.2	1972.7	1994.0	2206.3	2206.3	1719.4
55°	1042.4	1067.2	1218.7	1465.2	1692.0	1859.7	2041.1	2116.5	2374.9	2378.4	1834.9
57.5°	844.7	860.1	934.6	1187.0	1510.5	1816.9	2122.4	2221.7	2515.2	2530.7	1983.8
60°	685.5	694.1	742.9	918.3	1259.8	1701.4	2180.6	2372.3	2715.5	2736.9	2173.8
62.5°	551.2	559.8	592.2	697.4	988.5	1484.8	2170.4	2528.9	2982.5	3017.6	2422.9
65°	439.9	449.3	470.7	535.7	732.5	1216.1	2065.1	2609.4	3259.0	3293.2	2588.0
67.5°	343.2	351.8	366.3	409.1	516.1	909.7	1816.0	2524.6	3383.1	3412.2	2596.6
70°	259.3	263.6	275.6	303.0	368.9	604.3	1421.5	2240.6	3271.8	3298.3	2425.4
72.5°	201.1	200.3	207.1	220.8	257.6	415.9	942.2	1822.1	2892.7	2920.1	2069.4
75°	164.3	163.5	167.8	172.1	186.6	279.0	556.3	1371.9	2334.7	2282.5	1552.4
77.5°	138.6	137.8	142.1	142.9	148.9	192.5	316.7	902.9	1557.6	1467.7	874.6
80°	117.2	116.4	121.5	123.3	127.6	141.2	182.3	488.7	782.3	741.1	417.7
82.5°	88.2	91.6	101.0	105.3	110.4	104.4	112.9	215.6	362.8	346.6	181.5
85°	42.8	50.5	76.2	84.7	90.7	65.9	77.0	101.9	163.5	155.8	73.6
87.5°	14.5	12.8	45.3	53.9	59.0	30.0	42.8	56.5	67.6	61.6	23.1
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°	405.7	405.7	405.7	405.7	405.7	405.7	405.7	405.7	405.7	405.7	405.7
2.5°	409.9	397.1	378.3	363.8	354.4	346.6	343.2	342.3	340.6	339.7	339.7
5°	418.5	395.4	366.3	350.9	346.6	343.2	344.9	345.8	345.8	345.8	345.8
7.5°	431.4	398.8	363.8	353.4	352.6	352.6	357.7	360.3	362.0	362.0	362.0
10°	448.5	404.8	368.0	359.5	362.0	363.8	369.7	373.2	374.8	375.7	376.5
12.5°	471.6	417.7	376.5	369.7	373.2	374.0	378.3	380.0	381.7	382.6	382.6
15°	502.4	436.5	390.3	381.7	382.6	381.7	381.7	380.0	379.1	379.1	380.8
17.5°	534.1	454.4	402.2	390.3	386.9	380.0	374.8	370.6	368.0	366.3	367.1
20°	565.7	470.7	409.1	392.0	382.6	371.4	362.0	356.0	352.6	349.1	350.9
22.5°	597.4	486.1	411.6	386.9	373.2	356.9	346.6	337.2	329.5	324.4	325.2
25°	632.5	503.2	411.6	380.8	360.3	343.2	330.3	315.0	303.8	299.5	301.3
27.5°	667.6	517.8	407.3	369.7	345.8	328.7	309.9	291.8	285.0	282.4	283.3
30°	702.7	528.9	397.9	356.0	330.3	311.5	286.7	274.8	266.2	259.3	260.1
32.5°	737.8	536.6	385.1	338.9	314.0	290.1	269.5	255.9	240.5	231.9	232.8
35°	778.0	542.6	369.7	321.8	296.1	271.3	255.9	233.6	217.4	210.5	208.8
37.5°	819.9	546.9	353.4	303.0	278.1	257.6	242.2	214.8	199.4	190.0	189.1
40°	865.2	548.6	333.8	283.3	261.1	249.1	224.2	203.7	177.2	171.1	171.1
42.5°	919.1	547.7	314.0	263.6	242.2	229.3	211.3	201.9	178.9	172.9	169.5
45°	980.8	547.7	292.7	240.5	223.4	204.6	196.8	190.9	175.4	178.0	179.7
47.5°	1051.0	546.1	267.0	221.7	208.0	191.7	187.4	174.6	168.6	170.3	172.1
50°	1147.6	548.6	243.9	206.2	196.8	183.1	178.0	171.1	168.6	169.5	168.6
52.5°	1282.1	540.0	221.7	196.8	188.3	170.3	170.3	169.5	170.3	169.5	169.5
55°	1355.6	521.2	205.4	191.7	182.3	164.3	167.8	169.5	171.1	170.3	170.3
57.5°	1460.1	508.4	192.5	188.3	178.9	162.6	166.0	169.5	170.3	169.5	169.5
60°	1583.3	499.8	184.0	189.1	176.3	162.6	166.8	169.5	168.6	167.8	167.8
62.5°	1726.2	496.3	178.0	191.7	173.7	163.5	166.8	169.5	166.0	165.2	165.2
65°	1780.1	465.5	170.3	193.4	175.4	163.5	166.0	166.8	162.6	161.7	160.9
67.5°	1697.1	412.6	159.2	190.0	180.6	163.5	163.5	162.6	157.4	156.6	154.9
70°	1511.4	342.3	142.1	178.9	184.0	164.3	160.0	155.8	150.6	150.6	147.2
72.5°	1237.6	269.5	119.8	159.2	181.5	166.8	153.2	147.2	141.2	141.2	137.8
75°	891.8	201.1	95.9	132.7	170.3	166.0	144.6	137.0	130.1	129.2	124.9
77.5°	508.4	141.2	77.8	103.5	151.5	161.7	137.0	124.9	117.2	114.7	112.1
80°	261.1	95.0	63.3	81.3	125.8	149.8	130.9	111.3	102.7	98.4	94.1
82.5°	124.1	63.3	48.8	59.9	95.0	130.9	123.3	95.9	86.4	81.3	76.2
85°	55.6	37.6	32.5	38.5	67.6	101.9	108.7	78.8	67.6	84.7	62.5
87.5°	18.0	17.1	17.1	18.0	32.5	44.5	79.6	58.2	53.9	44.5	37.6
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)