

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: P348962

Luminaire Tested: **ARCH-N-PA1-20-830-U-T2U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348962
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1908-474-1)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-20-830-U-T2U
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 420mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2710 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

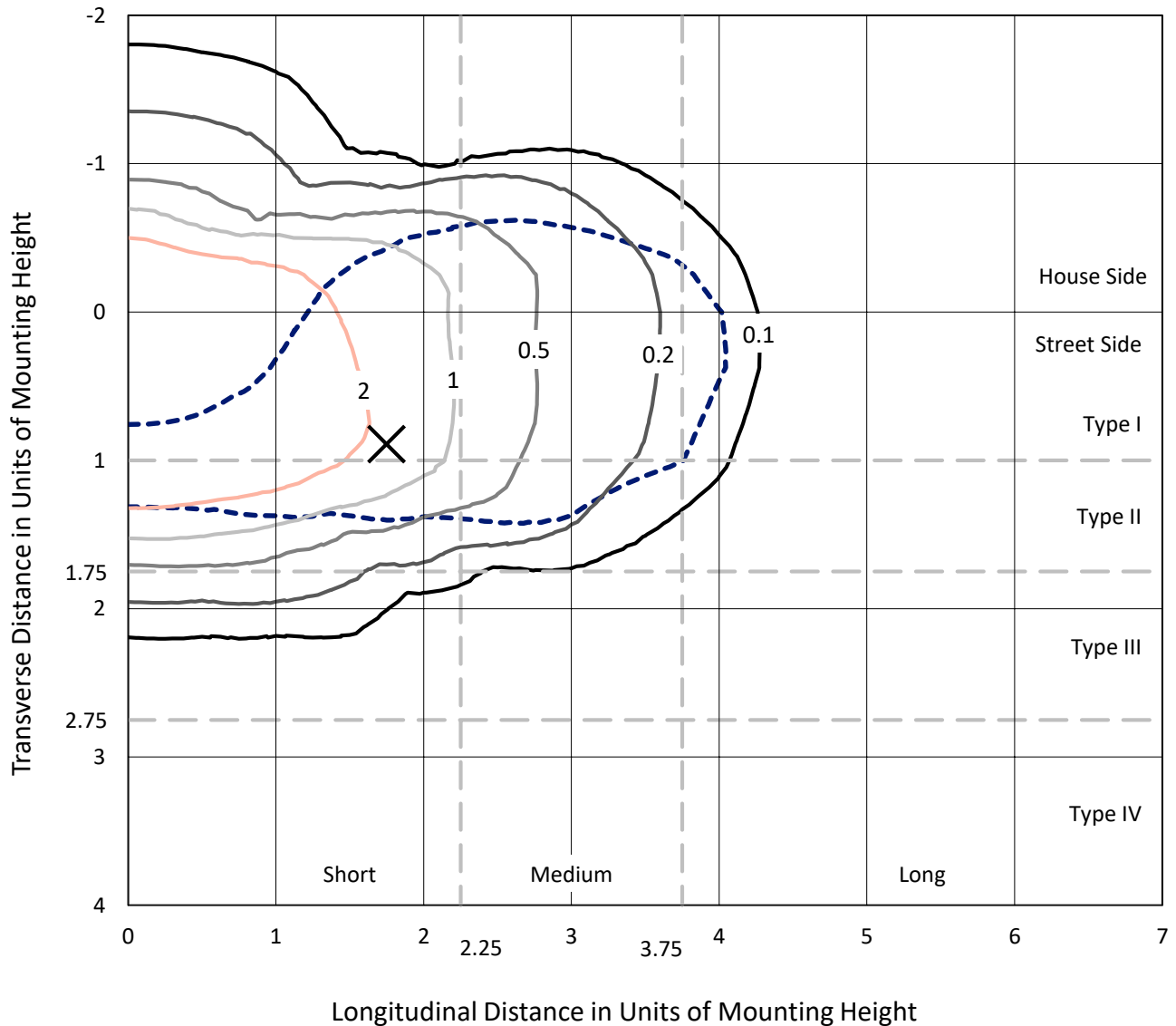
Input Watts (W): 24
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

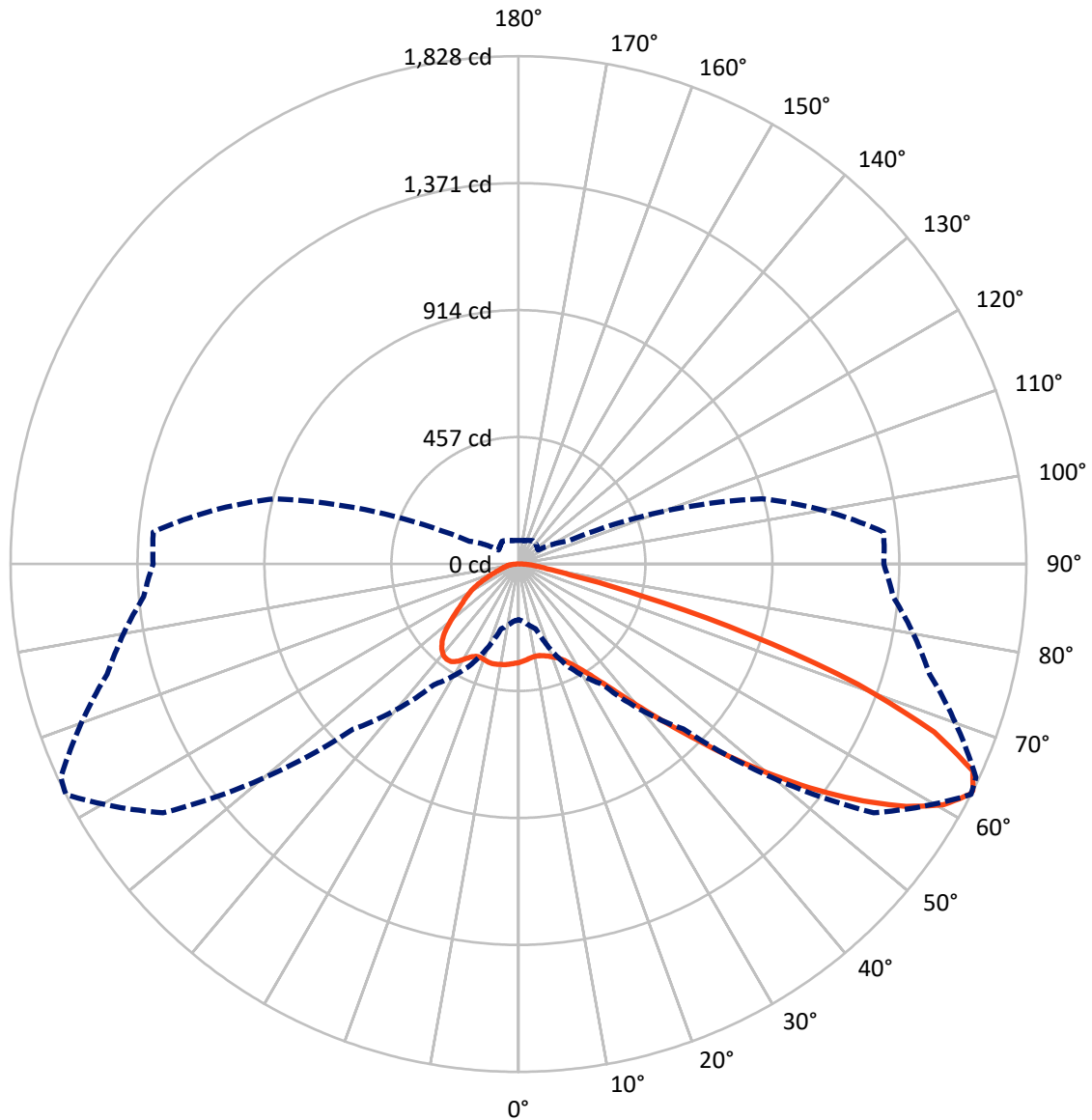
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.7 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	773.7	0.0	773.7
	% Fixture	28.5	0.0	28.5
Street Side	Lumens	1936.3	0.0	1936.3
	% Fixture	71.5	0.0	71.5
Total	Lumens	2710.0	0.0	2710.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.7	1.2
10°-20°	99.3	3.7
20°-30°	174.5	6.4
30°-40°	294.1	10.9
40°-50°	515.1	19.0
50°-60°	665.8	24.6
60°-70°	576.3	21.3
70°-80°	299.2	11.0
80°-90°	52.1	1.9
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°	2710.0	100.0
0°-180°	2710.0	100.0



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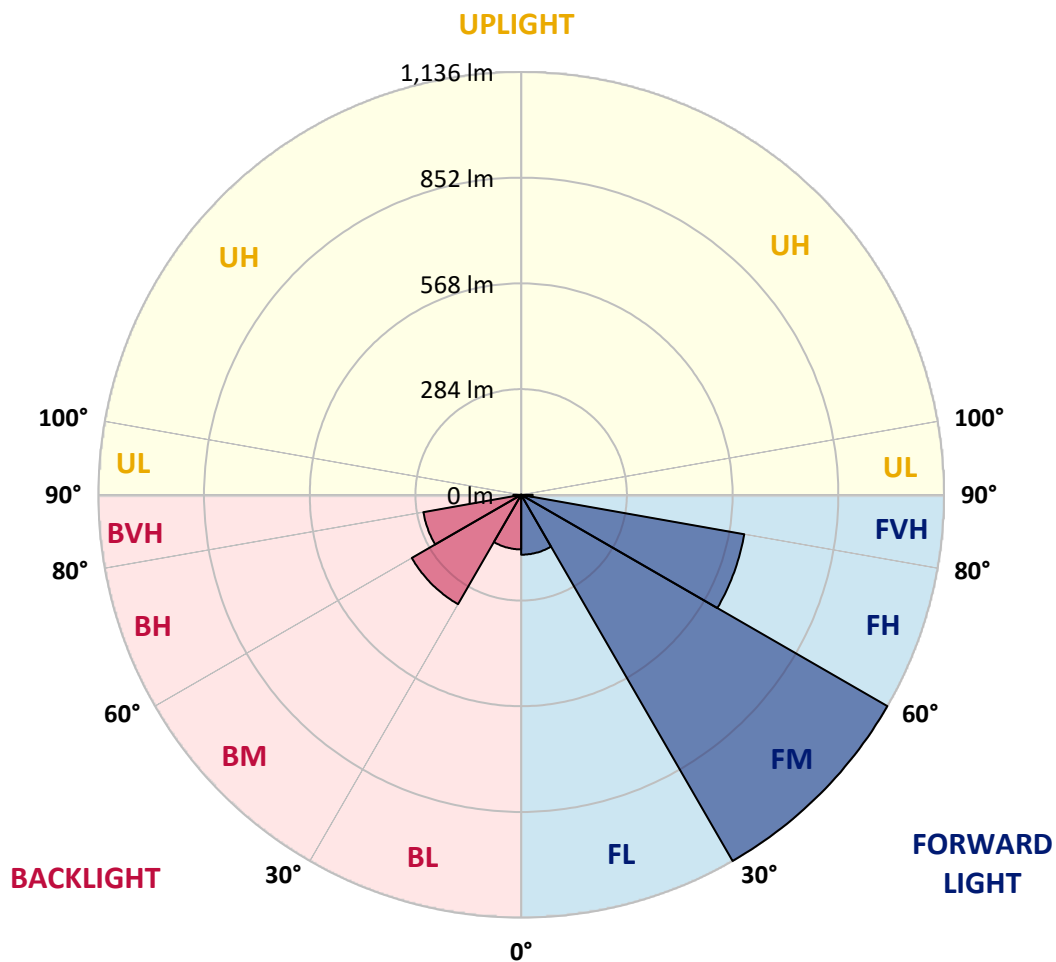
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	160.9	5.9			
FM	(30°-60°)	1135.8	41.9			
FH	(60°-80°)	608.6	22.5			G0/660
FVH	(80°-90°)	31.0	1.1			G1/100
BL	(0°-30°)	146.6	5.4	B1/500		
BM	(30°-60°)	339.1	12.5	B1/1000		
BH	(60°-80°)	266.9	9.8	B1/500		G1/500
BVH	(80°-90°)	21.1	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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	354.8	354.8	354.8	354.8	354.8	354.8	354.8	354.8	354.8	354.8	354.8
2.5°	346.4	345.4	347.2	348.0	347.7	349.2	349.2	349.5	349.5	350.8	352.0
5°	336.3	335.8	337.6	338.8	339.9	342.1	343.7	344.4	345.2	347.0	350.0
7.5°	326.7	325.9	328.4	329.5	331.0	334.3	337.8	339.9	340.9	344.7	349.0
10°	318.8	318.6	320.6	321.6	323.4	328.2	333.3	337.6	338.3	343.4	347.5
12.5°	315.0	314.5	316.8	318.0	321.1	326.9	332.8	338.1	339.3	345.2	348.7
15°	318.0	318.6	320.6	320.8	324.4	330.5	337.1	342.4	343.7	349.5	352.0
17.5°	332.5	332.2	333.5	333.0	334.3	337.3	344.4	348.7	350.3	354.6	356.6
20°	358.6	357.9	358.9	355.6	350.0	348.5	352.8	357.6	358.1	360.7	359.4
22.5°	398.4	399.2	396.9	388.6	375.1	368.8	366.0	367.5	369.3	369.0	365.2
25°	450.4	453.0	448.7	433.9	411.4	396.7	386.5	384.2	385.5	382.0	376.1
27.5°	518.7	520.7	511.3	488.5	458.0	436.2	415.9	408.1	408.1	400.5	389.8
30°	593.7	595.0	580.0	551.1	515.9	483.4	453.5	438.3	437.0	422.0	405.3
32.5°	685.0	681.5	663.7	628.0	583.6	538.9	500.4	477.3	474.8	452.2	430.9
35°	803.0	803.0	766.2	725.4	671.3	614.5	563.8	528.0	525.5	499.9	472.2
37.5°	931.0	930.5	897.3	841.0	776.3	706.8	639.1	594.5	588.7	561.3	530.3
40°	1058.6	1054.3	1027.4	973.9	904.9	825.5	732.2	680.2	677.4	638.4	599.6
42.5°	1152.0	1147.9	1135.2	1099.5	1054.1	996.7	853.2	782.9	778.9	729.7	682.2
45°	1203.4	1197.6	1195.8	1196.3	1201.4	1201.2	1002.6	904.4	890.2	833.2	770.0
47.5°	1191.8	1178.1	1196.3	1243.3	1322.1	1373.9	1176.6	1048.7	1022.4	940.7	863.6
50°	1097.7	1091.1	1130.1	1225.8	1387.8	1509.3	1368.0	1198.6	1161.3	1042.4	952.1
52.5°	932.6	945.3	993.4	1129.4	1375.9	1591.2	1542.0	1354.3	1302.6	1139.3	1028.9
55°	742.4	758.3	826.3	970.4	1265.6	1592.2	1667.6	1505.3	1459.1	1239.5	1107.6
57.5°	540.2	562.8	647.8	779.9	1072.1	1483.4	1729.5	1646.5	1593.8	1338.1	1184.4
60°	339.3	355.3	447.9	601.1	819.5	1243.3	1714.0	1759.6	1716.0	1431.2	1272.2
62.5°	218.6	226.2	266.3	429.1	571.4	911.8	1599.6	1824.6	1805.8	1516.2	1338.4
63°	200.4	207.0	241.2	396.7	529.8	840.0	1561.0	1827.9	1816.7	1532.1	1353.8
65°	143.3	150.4	168.2	272.6	391.1	563.5	1337.6	1797.2	1809.6	1558.8	1374.9
67.5°	113.1	115.4	123.5	165.6	277.5	320.1	900.1	1613.8	1668.3	1530.4	1343.7
70°	101.2	103.0	112.1	127.1	210.0	207.5	469.5	1297.5	1410.4	1433.5	1265.1
72.5°	88.3	89.5	100.7	119.7	160.3	158.5	204.2	872.5	1009.7	1255.9	1156.3
75°	73.0	74.3	83.7	106.3	135.7	125.3	127.8	456.0	578.8	984.6	1014.0
77.5°	60.1	60.9	68.7	85.5	119.5	96.6	98.9	191.7	281.3	671.1	800.7
80°	43.6	43.9	51.2	64.9	91.3	87.2	73.6	104.5	127.6	367.8	503.7
82.5°	30.4	30.7	38.3	45.4	62.9	87.0	53.5	70.0	76.6	169.4	224.2
85°	21.3	20.8	26.1	29.9	39.8	52.8	40.8	44.9	47.4	73.3	60.4
87.5°	9.4	9.1	14.7	16.0	20.0	24.3	32.5	23.6	25.1	35.5	19.0
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°	354.8	354.8	354.8	354.8	354.8	354.8	354.8	354.8	354.8	354.8	354.8
2.5°	352.3	353.3	354.8	357.1	358.9	359.6	361.2	361.4	363.7	361.7	361.9
5°	351.8	353.0	356.3	360.4	363.2	365.2	369.0	370.3	372.6	371.6	371.3
7.5°	351.0	353.3	358.1	363.9	368.3	371.6	375.1	377.4	379.7	379.2	378.7
10°	350.0	352.8	359.6	365.5	371.6	375.1	377.6	377.9	378.7	378.2	376.9
12.5°	350.8	353.8	361.7	367.5	373.8	376.4	375.6	371.8	368.5	365.7	365.2
15°	353.3	356.8	364.2	369.5	374.6	373.1	368.5	360.1	354.1	350.5	350.8
17.5°	355.8	358.9	364.5	368.8	371.3	366.7	359.6	352.5	349.7	347.0	346.4
20°	358.1	358.6	362.2	366.0	365.7	362.2	355.6	347.0	341.4	336.8	337.1
22.5°	361.7	359.6	359.9	362.2	365.0	361.7	346.2	331.2	322.9	317.5	317.3
25°	369.8	365.5	361.4	362.7	373.3	352.3	326.2	306.6	299.3	294.5	295.0
27.5°	380.9	375.1	367.0	373.8	379.7	333.8	297.5	277.5	272.4	267.3	268.6
30°	393.1	384.7	374.9	397.9	372.6	304.3	262.0	243.7	239.2	234.3	235.4
32.5°	414.9	402.5	389.6	426.8	356.1	268.6	224.7	208.2	205.2	202.1	202.4
35°	451.2	436.5	422.5	448.9	334.8	231.3	191.2	179.6	177.0	173.5	173.5
37.5°	504.7	481.6	474.3	460.6	305.6	196.6	166.6	158.8	153.4	148.6	148.6
40°	566.8	539.5	533.6	464.1	267.6	167.6	149.4	142.5	135.4	128.3	128.8
42.5°	642.4	605.4	592.0	459.3	221.4	149.1	137.2	129.3	122.5	116.4	115.4
45°	727.6	680.7	646.7	445.4	179.6	137.7	129.3	120.0	111.3	106.0	105.0
47.5°	814.6	762.4	695.2	417.5	150.1	129.6	124.0	110.8	104.7	101.2	100.7
50°	897.8	843.3	735.3	373.6	133.2	123.8	116.2	106.5	101.4	98.4	98.2
52.5°	971.6	920.1	769.0	328.2	121.7	118.9	112.6	104.5	99.2	96.4	95.9
55°	1041.9	998.0	802.5	287.6	111.8	110.8	110.8	102.5	96.6	94.1	93.6
57.5°	1119.0	1086.5	836.2	257.9	103.0	105.0	108.6	100.2	93.8	91.6	91.3
60°	1208.0	1189.0	871.7	231.8	95.1	98.7	105.3	97.1	90.5	88.8	88.3
62.5°	1299.1	1299.6	902.4	200.4	88.5	93.8	101.4	94.3	87.5	86.2	86.0
63°	1315.0	1319.6	906.7	193.5	87.0	92.8	100.4	93.3	86.7	85.5	85.2
65°	1354.3	1374.4	910.3	164.6	81.4	89.0	96.6	90.0	83.4	83.2	82.7
67.5°	1345.0	1377.7	888.2	129.1	75.1	83.7	91.3	85.2	79.4	79.4	78.4
70°	1275.0	1296.3	820.5	99.7	70.3	78.1	85.0	80.1	74.1	74.6	72.5
72.5°	1167.7	1144.3	674.9	77.9	64.4	71.8	77.6	73.6	68.2	67.7	65.4
75°	1010.4	933.6	483.4	62.9	57.3	63.4	69.5	66.4	61.6	58.8	58.3
77.5°	770.0	662.7	289.6	53.3	51.2	56.3	60.1	57.8	54.0	50.7	51.0
80°	458.5	382.2	130.6	45.1	44.4	48.2	51.2	49.5	46.9	42.9	41.8
82.5°	185.7	147.9	58.6	36.5	37.5	40.3	43.1	41.6	39.6	38.6	32.7
85°	48.2	46.4	34.2	27.4	28.9	30.2	34.0	34.0	32.2	26.4	24.3
87.5°	13.7	18.3	19.0	17.2	19.5	19.8	23.6	23.6	24.1	16.2	14.7
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)