

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: P348584

Luminaire Tested: **ARCH-N-PA1-20-727-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348584
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-14)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-20-727-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 420mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2853 lumens
Efficiency: N/A
Efficacy: 118.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - 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

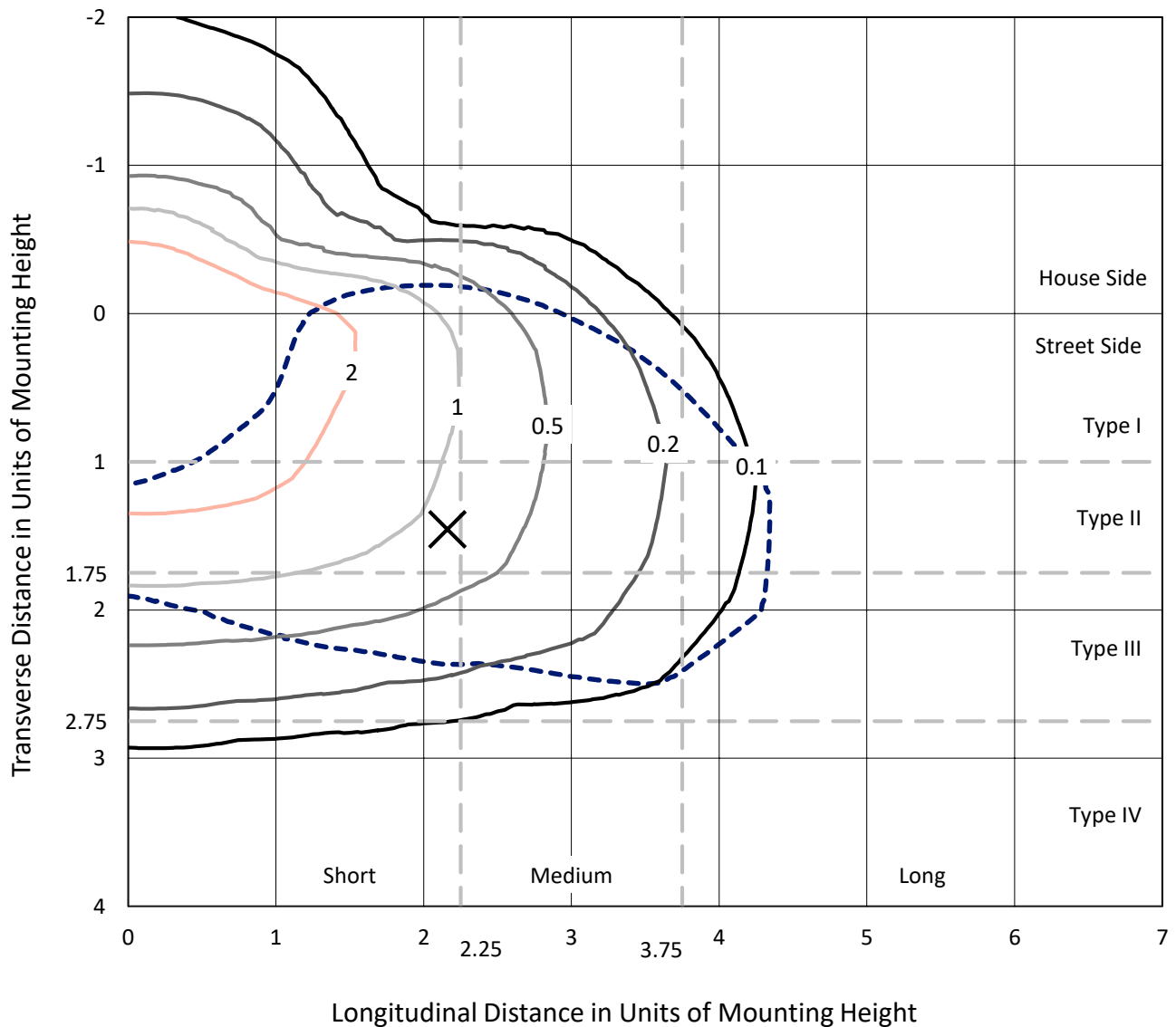


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

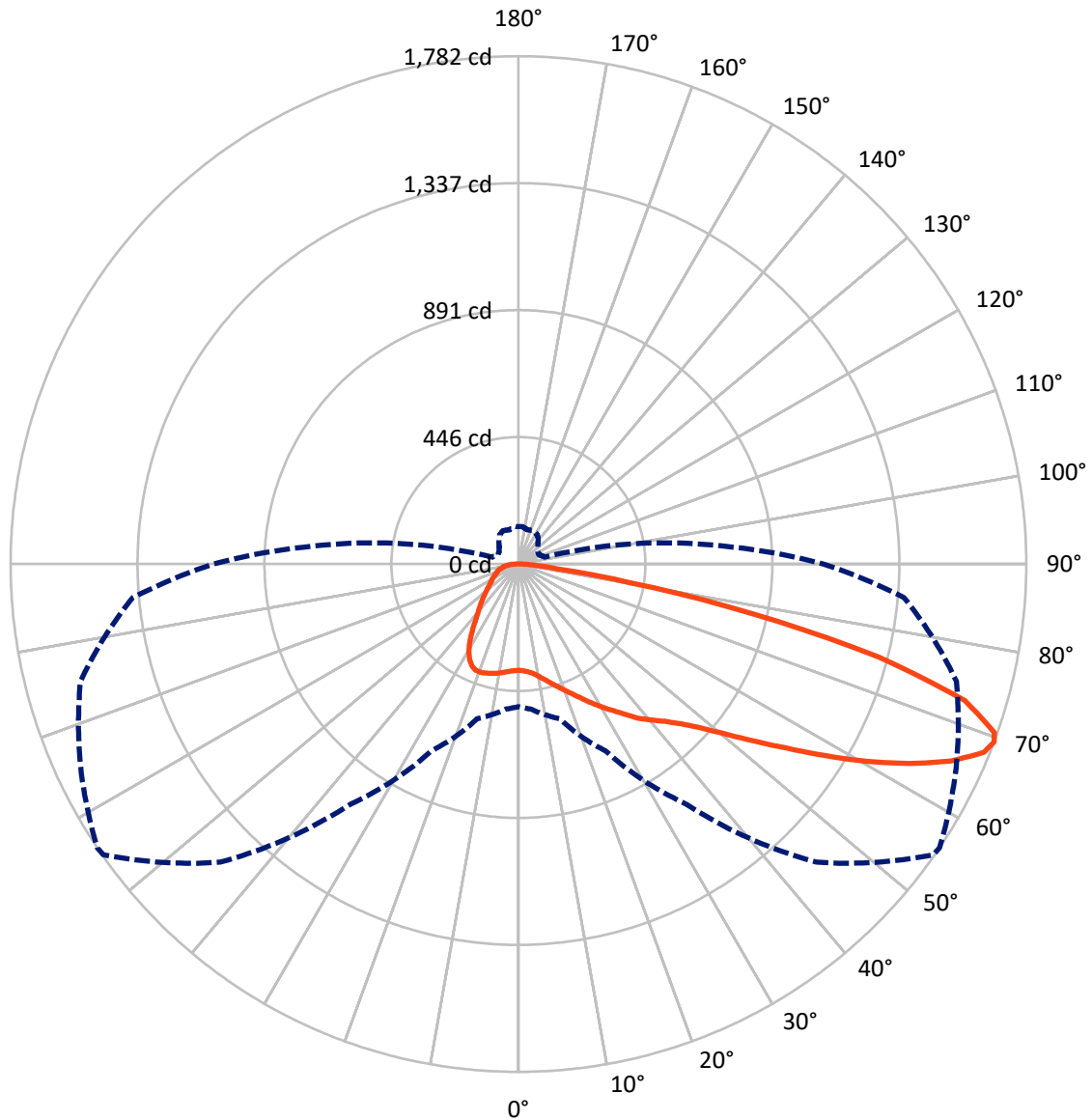


Based on 10 foot mounting height. Maximum calculated value = 4.1 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	635.4	0.0	635.4
	% Fixture	22.3	0.0	22.3
Street Side	Lumens	2217.6	0.0	2217.6
	% Fixture	77.7	0.0	77.7
Total	Lumens	2853.0	0.0	2853.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.6	1.3
10°-20°	117.8	4.1
20°-30°	205.6	7.2
30°-40°	295.4	10.4
40°-50°	408.8	14.3
50°-60°	598.9	21.0
60°-70°	730.2	25.6
70°-80°	403.7	14.2
80°-90°	55.9	2.0
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°	2853.0	100.0
0°-180°	2853.0	100.0



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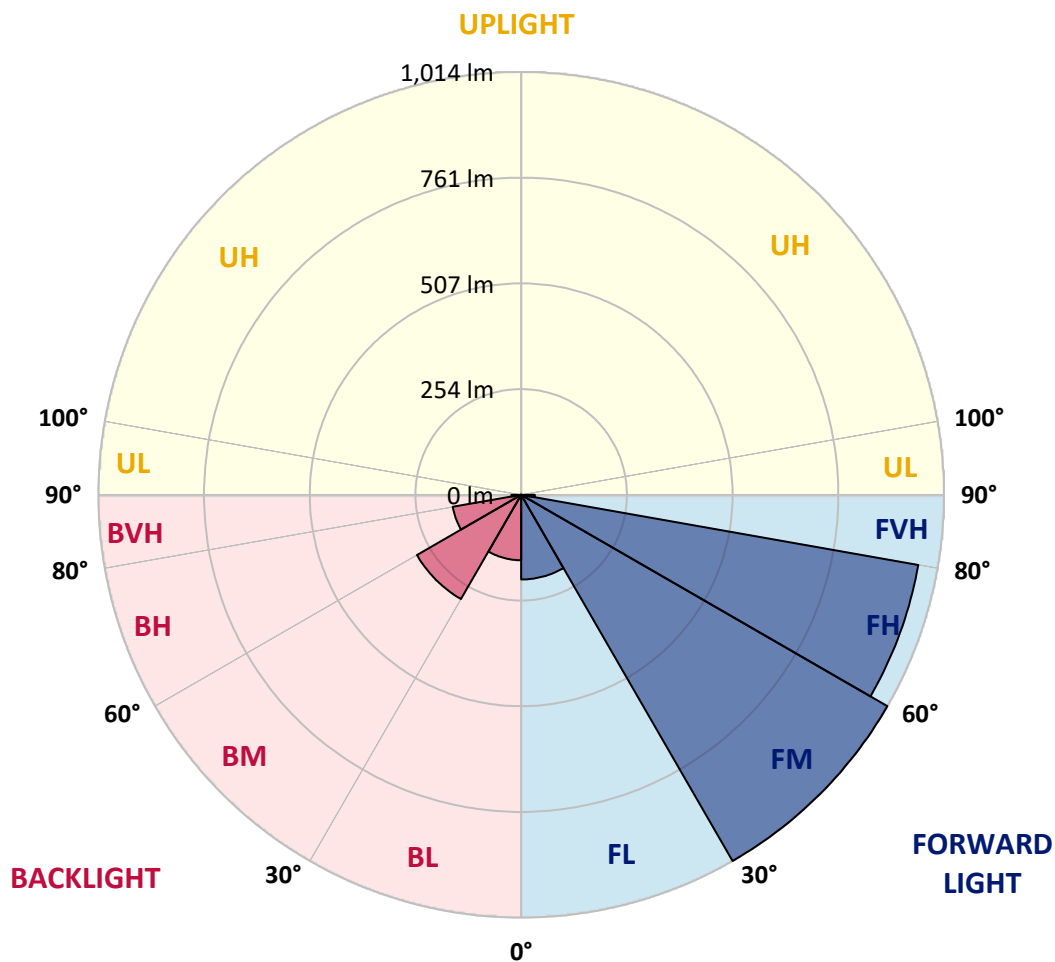
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	203.0	7.1			
FM (30°-60°)	1014.4	35.6			
FH (60°-80°)	967.3	33.9			G1/1800
FVH (80°-90°)	32.9	1.2			G1/100
BL (0°-30°)	157.0	5.5	B1/500		
BM (30°-60°)	288.8	10.1	B1/1000		
BH (60°-80°)	166.6	5.8	B1/500		G1/500
BVH (80°-90°)	23.0	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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	373.0	373.0	373.0	373.0	373.0	373.0	373.0	373.0	373.0	373.0	373.0
2.5°	375.3	375.7	375.4	376.2	375.3	375.9	375.4	375.4	375.1	374.3	373.3
5°	381.2	382.0	381.5	382.3	381.2	381.4	380.6	380.6	379.7	377.8	375.8
7.5°	390.5	391.4	391.0	391.8	390.3	390.3	389.1	389.0	387.2	384.2	381.9
10°	401.5	402.7	402.3	403.5	402.3	402.7	401.5	401.5	399.1	394.8	392.0
12.5°	417.5	419.0	417.9	417.8	417.3	418.1	417.1	416.9	414.8	408.9	404.9
15°	438.9	440.5	438.2	438.1	435.3	435.0	435.0	434.7	433.3	426.3	419.8
17.5°	463.6	464.1	462.1	459.0	455.4	453.2	452.9	453.7	453.7	445.4	435.1
20°	487.8	488.7	487.1	483.6	479.0	475.7	473.3	474.9	474.8	465.0	450.3
22.5°	514.1	516.2	513.8	509.3	504.0	500.3	496.1	497.5	497.6	485.5	465.3
25°	548.2	546.4	544.9	538.5	530.9	527.1	523.3	524.6	524.2	507.6	480.7
27.5°	578.4	578.8	576.8	570.0	561.3	552.8	552.6	553.5	552.1	530.6	495.3
30°	613.5	613.7	610.9	604.8	595.3	584.4	581.8	583.3	580.2	552.5	510.6
32.5°	648.4	649.4	646.3	638.9	631.3	618.0	612.9	613.9	606.0	574.8	526.4
35°	678.9	680.3	679.3	674.4	666.1	654.7	648.6	648.0	638.3	602.1	547.3
37.5°	710.1	711.4	710.3	706.2	702.8	690.7	687.5	687.5	670.6	630.0	574.0
40°	742.1	744.1	742.8	737.1	734.3	728.8	721.0	719.1	700.9	663.5	617.4
42.5°	771.9	774.5	779.6	776.2	770.4	771.2	755.6	754.6	741.3	713.0	672.0
45°	814.2	817.9	826.6	824.0	822.8	818.5	799.9	799.0	793.9	779.7	739.7
47.5°	860.3	865.4	881.0	881.5	894.2	886.0	860.8	857.7	858.9	859.5	822.3
50°	902.7	908.3	934.0	946.1	976.0	977.7	937.3	934.6	939.2	952.8	918.7
52.5°	936.6	943.7	975.8	1013.1	1064.3	1078.9	1031.6	1029.5	1033.0	1056.4	1027.6
55°	961.5	969.2	1004.1	1072.1	1153.9	1179.5	1140.1	1138.1	1140.3	1170.1	1146.0
57.5°	967.3	969.2	1019.8	1111.8	1229.4	1291.1	1272.9	1268.9	1258.3	1284.3	1276.7
60°	940.1	947.6	1006.8	1125.7	1287.9	1401.0	1411.6	1406.7	1377.0	1398.2	1392.1
62.5°	884.8	898.2	958.4	1104.5	1310.8	1490.9	1547.8	1541.9	1490.6	1504.3	1475.0
65°	794.6	800.3	863.5	1031.3	1281.7	1548.4	1669.2	1666.2	1601.6	1580.1	1490.4
67.5°	633.2	644.0	697.6	878.3	1162.7	1541.6	1763.0	1762.7	1674.2	1608.2	1436.0
69°	500.3	511.4	562.5	723.5	1028.8	1479.6	1778.7	1782.2	1694.6	1591.1	1358.4
70°	398.8	411.7	446.8	609.4	910.0	1397.8	1765.7	1771.9	1690.7	1562.9	1286.7
72.5°	169.7	180.2	205.1	314.1	554.6	1043.8	1614.4	1637.8	1599.6	1430.4	1063.4
75°	74.1	77.3	88.7	128.1	246.2	568.1	1264.7	1308.0	1367.7	1209.1	792.2
77.5°	54.3	55.6	61.8	75.2	110.5	214.6	813.3	838.5	986.4	879.8	485.9
80°	42.0	42.9	47.8	55.2	72.1	86.8	370.9	392.5	554.6	451.9	202.4
82.5°	33.4	34.1	37.4	40.7	49.8	52.6	123.1	136.6	204.7	124.8	53.6
85°	31.1	31.8	33.0	29.7	31.9	30.9	53.3	55.7	61.8	49.0	22.4
87.5°	14.1	16.6	32.7	23.1	17.0	13.6	21.8	22.8	25.7	25.8	9.9
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°	373.0	373.0	373.0	373.0	373.0	373.0	373.0	373.0	373.0	373.0	373.0
2.5°	373.9	373.6	374.1	372.9	374.4	374.3	373.8	374.0	375.0	374.9	375.0
5°	376.1	375.9	376.5	375.6	377.4	378.0	378.1	379.0	380.1	380.4	380.4
7.5°	381.8	381.8	382.1	380.9	382.1	382.0	381.5	382.4	383.5	383.6	383.5
10°	391.7	391.8	391.3	388.2	387.2	384.6	382.1	382.2	383.6	384.7	385.0
12.5°	404.0	403.7	401.5	395.9	391.8	386.4	383.8	383.7	385.1	386.0	386.3
15°	418.2	417.1	411.5	402.4	395.1	389.8	385.7	384.7	383.9	382.9	383.0
17.5°	431.6	429.1	419.8	407.1	399.4	392.3	384.4	378.0	373.6	371.0	370.2
20°	445.1	440.3	426.8	411.5	401.8	388.9	373.6	360.6	352.5	348.8	348.1
22.5°	457.5	449.7	433.4	416.1	399.9	377.3	353.2	334.4	323.2	318.1	318.5
25°	469.6	458.8	440.3	419.4	390.5	356.9	324.9	301.7	288.8	283.2	283.0
27.5°	480.2	467.9	447.8	416.7	372.9	327.8	291.4	268.8	258.0	253.2	252.4
30°	492.4	479.4	457.7	406.6	347.1	294.2	258.7	242.8	235.1	230.3	229.4
32.5°	507.2	495.1	465.9	388.2	314.2	259.1	233.1	222.0	215.0	209.6	208.7
35°	528.9	515.7	467.9	361.9	278.0	231.4	214.4	203.0	193.5	186.5	185.9
37.5°	556.0	541.5	463.2	327.8	243.0	213.4	198.7	184.7	172.4	162.6	161.0
40°	595.1	573.3	450.1	288.5	217.1	199.5	183.5	167.5	152.2	140.7	138.5
42.5°	642.1	610.5	430.1	249.3	198.1	185.5	168.4	148.5	134.0	125.8	124.6
45°	701.8	649.3	402.3	215.1	179.5	171.4	152.0	133.8	124.7	118.7	117.7
47.5°	770.1	692.7	373.1	187.3	163.6	158.2	139.0	127.2	120.0	115.3	114.4
50°	853.9	741.7	342.1	164.5	147.7	142.4	132.8	123.5	117.8	114.2	113.3
52.5°	948.4	797.1	319.8	146.5	134.6	130.7	129.5	121.6	117.0	114.2	113.3
55°	1050.3	853.4	295.7	131.4	123.1	124.2	127.4	121.8	118.6	115.3	114.0
57.5°	1152.2	911.6	268.9	118.6	114.1	119.4	125.9	122.2	119.5	116.3	115.1
60°	1232.8	948.4	227.3	107.9	106.9	114.1	122.4	119.2	115.8	115.9	115.7
62.5°	1270.4	946.5	181.4	98.4	99.8	106.9	116.7	114.6	111.7	115.6	115.9
65°	1249.3	899.3	141.2	89.7	92.1	99.5	110.8	112.3	113.3	120.7	121.7
67.5°	1160.6	807.5	109.4	82.2	85.1	94.4	111.4	122.4	123.6	131.4	131.3
69°	1068.9	721.4	95.0	78.2	81.7	95.6	119.0	128.8	123.9	132.2	131.0
70°	992.1	653.3	87.4	75.6	80.1	97.9	124.1	128.7	122.5	129.5	127.6
72.5°	764.1	470.0	74.1	70.7	74.8	93.7	125.6	125.8	119.0	120.4	117.1
75°	524.0	297.0	64.7	64.0	66.7	84.4	120.9	120.2	110.1	108.1	105.4
77.5°	289.0	150.9	54.9	57.6	59.5	74.8	109.9	108.9	100.5	96.4	95.4
80°	111.5	66.0	46.4	51.2	52.4	64.8	96.3	95.4	88.5	83.1	81.7
82.5°	42.1	34.6	38.3	44.3	43.9	53.5	81.6	81.1	74.3	66.5	64.2
85°	19.5	20.7	30.4	36.6	33.7	39.6	65.3	66.1	57.9	48.7	48.7
87.5°	8.3	11.6	21.5	27.6	22.7	26.7	47.9	45.7	42.0	29.1	27.3
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)