

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: P397539

Luminaire Tested: **ARCH-S-PA1-100-727-U-T2U**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397539
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-100-727-U-T2U
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9877 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B3 - U0 - G3

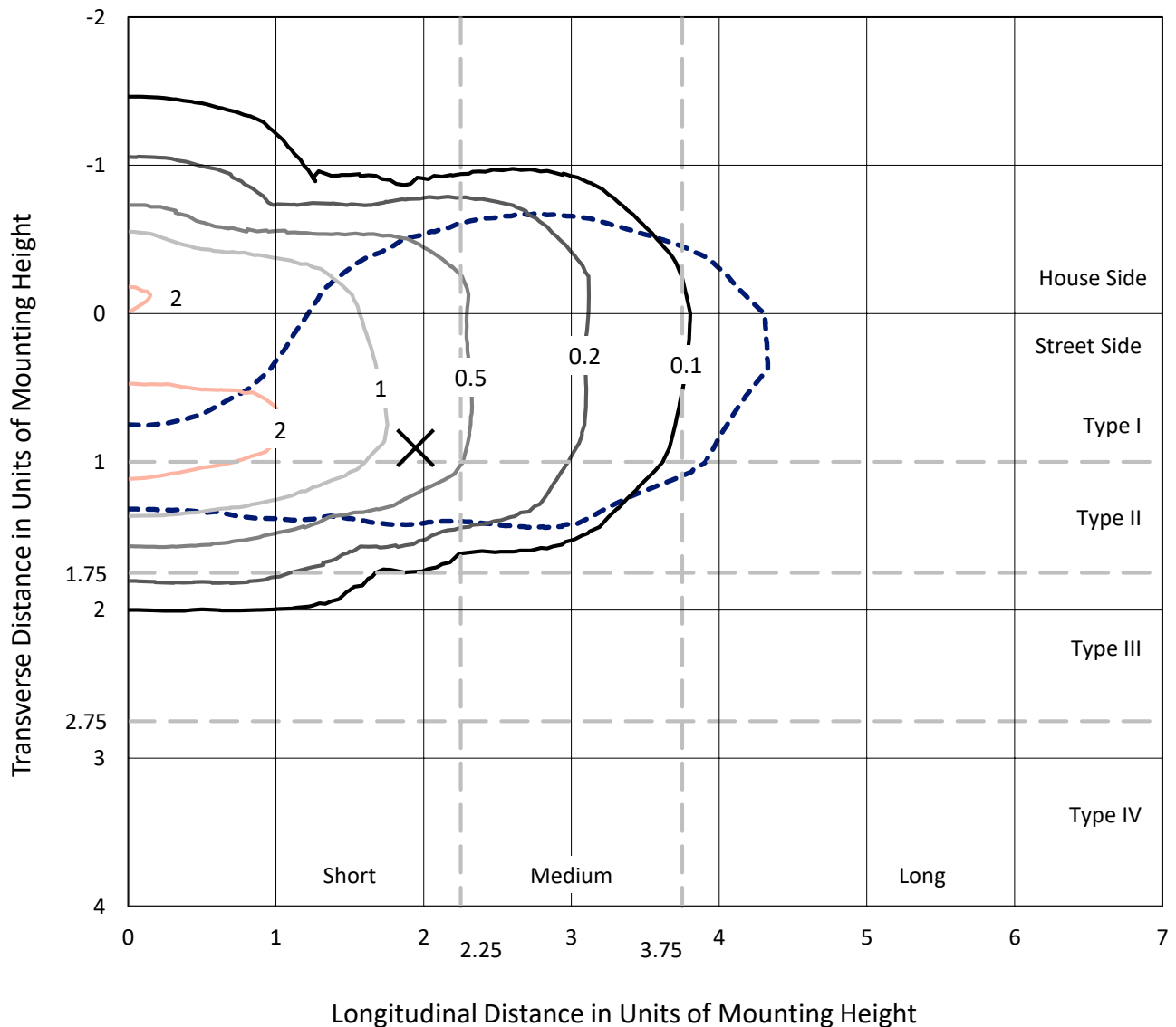
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

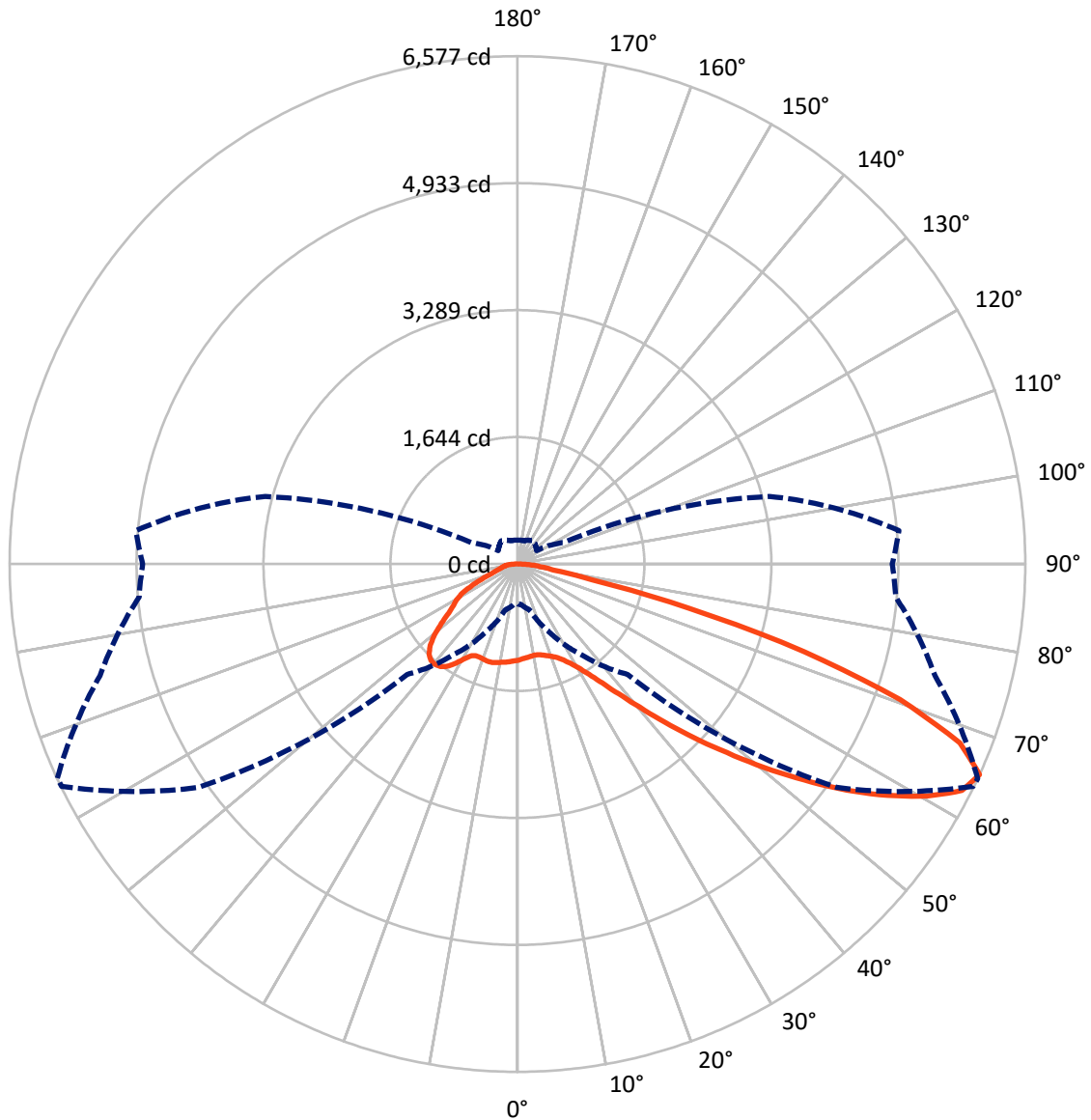
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2855.6	0.0	2855.6
	% Fixture	28.9	0.0	28.9
Street Side	Lumens	7021.4	0.0	7021.4
	% Fixture	71.1	0.0	71.1
Total	Lumens	9877.0	0.0	9877.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.9	1.2
10°-20°	355.0	3.6
20°-30°	630.6	6.4
30°-40°	1066.8	10.8
40°-50°	1857.1	18.8
50°-60°	2399.9	24.3
60°-70°	2100.1	21.3
70°-80°	1142.3	11.6
80°-90°	206.4	2.1
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°	9877.0	100.0
0°-180°	9877.0	100.0



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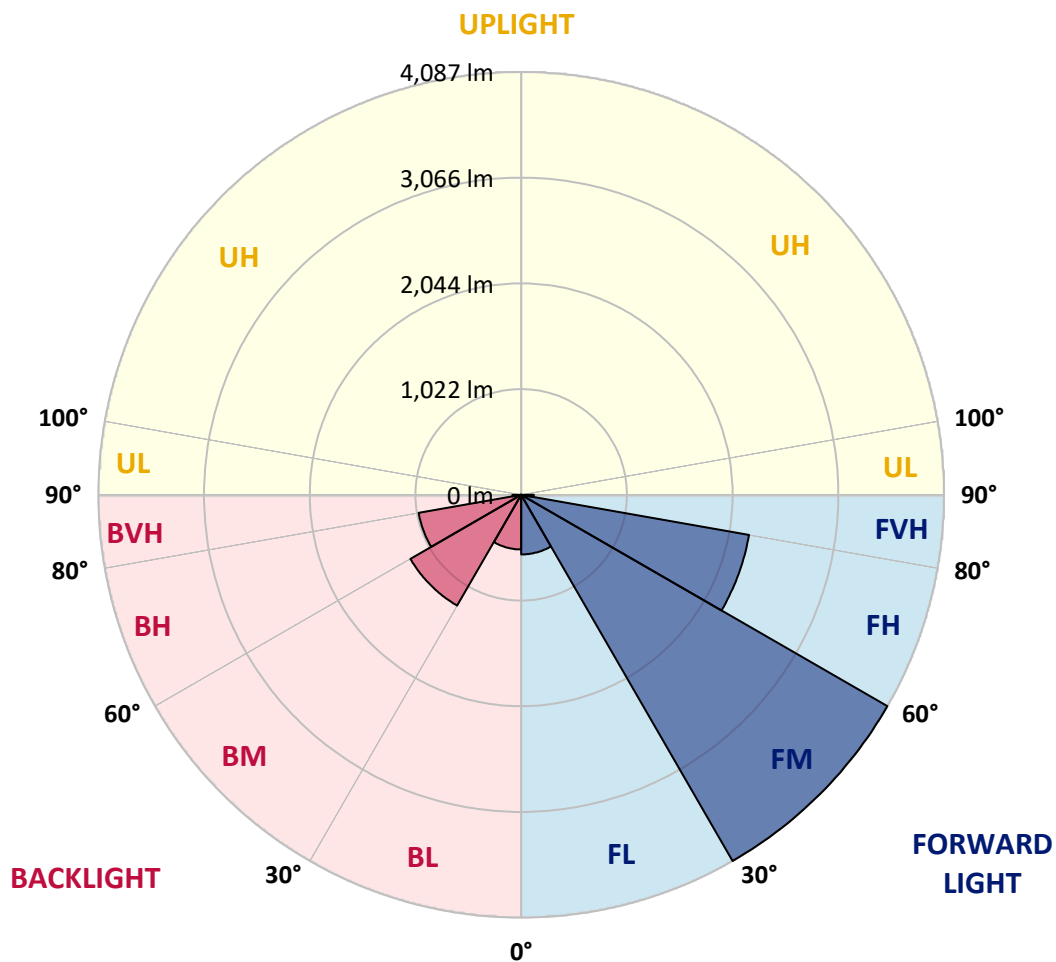
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	576.3	5.8			
FM	(30°-60°)	4087.4	41.4			
FH	(60°-80°)	2236.3	22.6			G2/5000
FVH	(80°-90°)	121.4	1.2			G2/225
BL	(0°-30°)	528.2	5.3	B2/1000		
BM	(30°-60°)	1236.4	12.5	B2/2500		
BH	(60°-80°)	1006.0	10.2	B3/2500		G3/2500
BVH	(80°-90°)	84.9	0.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1248.1	1248.1	1248.1	1248.1	1248.1	1248.1	1248.1	1248.1	1248.1	1248.1	1248.1
2.5°	1226.0	1224.7	1222.1	1224.7	1226.0	1228.6	1227.3	1229.9	1228.6	1232.5	1239.0
5°	1194.8	1192.2	1190.9	1197.4	1201.3	1207.8	1210.4	1219.5	1218.2	1224.7	1235.1
7.5°	1159.7	1159.7	1158.4	1166.2	1171.4	1183.1	1192.2	1207.8	1209.1	1220.8	1232.5
10°	1132.3	1133.6	1132.3	1138.8	1146.6	1161.0	1176.6	1198.7	1200.0	1216.9	1228.6
12.5°	1121.9	1121.9	1121.9	1131.0	1141.4	1161.0	1179.2	1202.6	1205.2	1223.4	1233.8
15°	1136.2	1137.5	1134.9	1144.0	1155.8	1179.2	1196.1	1220.8	1223.4	1240.3	1246.8
17.5°	1187.0	1192.2	1185.7	1190.9	1188.3	1206.5	1222.1	1246.8	1248.1	1262.4	1265.0
20°	1287.1	1292.3	1281.9	1275.4	1252.0	1250.7	1257.2	1276.7	1276.7	1285.8	1279.3
22.5°	1441.8	1447.0	1428.8	1404.1	1348.2	1320.9	1306.6	1315.7	1314.4	1318.3	1301.4
25°	1647.2	1645.9	1623.8	1578.3	1488.6	1422.3	1387.2	1372.9	1372.9	1365.1	1344.3
27.5°	1902.0	1882.5	1843.5	1788.9	1664.1	1571.8	1496.4	1460.0	1453.5	1430.1	1391.1
30°	2173.7	2159.4	2103.5	2024.2	1879.9	1761.6	1636.8	1564.0	1560.1	1509.4	1450.9
32.5°	2493.5	2470.1	2407.7	2312.8	2139.9	1973.5	1817.5	1707.0	1700.5	1619.9	1539.3
35°	2904.3	2884.8	2763.9	2669.0	2446.7	2228.3	2043.7	1896.8	1891.6	1792.8	1690.1
37.5°	3397.0	3346.3	3229.3	3051.2	2817.2	2558.5	2324.5	2139.9	2133.4	2024.2	1894.2
40°	3836.5	3791.0	3687.0	3523.2	3272.2	2984.9	2667.7	2444.1	2437.6	2305.0	2141.2
42.5°	4161.5	4130.3	4062.7	3967.8	3788.4	3614.2	3105.8	2812.0	2800.3	2628.7	2424.6
45°	4350.0	4325.3	4286.3	4309.7	4307.1	4274.6	3628.5	3250.1	3212.4	2990.1	2740.5
47.5°	4304.5	4282.4	4298.0	4480.0	4730.9	4919.4	4236.9	3698.7	3648.0	3358.0	3077.2
50°	3975.6	3984.7	4066.6	4415.0	4977.9	5396.5	4911.6	4209.6	4142.0	3728.6	3397.0
52.5°	3376.2	3398.3	3597.3	4084.8	4950.6	5705.9	5521.3	4737.4	4647.7	4090.0	3688.3
55°	2682.0	2737.9	2995.3	3507.6	4594.4	5728.0	5981.6	5267.8	5169.0	4429.3	3941.8
57.5°	1983.9	2067.1	2364.8	2835.4	3911.9	5378.3	6211.7	5774.9	5655.2	4766.0	4209.6
60°	1258.5	1309.2	1652.4	2207.5	2994.0	4522.9	6181.8	6206.5	6102.5	5101.4	4489.1
62.5°	803.4	828.1	1001.0	1574.4	2093.1	3348.9	5855.5	6532.8	6462.6	5406.9	4754.3
65°	516.1	526.5	614.9	968.5	1424.9	2021.6	5042.9	6567.9	6577.0	5598.0	4918.1
67.5°	419.9	425.1	457.6	598.0	1007.5	1116.7	3512.8	6068.7	6179.2	5548.6	4862.2
70°	382.2	388.7	422.5	477.1	780.0	770.9	1700.5	5078.0	5258.7	5263.9	4613.9
72.5°	322.4	331.5	377.0	451.1	603.2	608.4	720.2	3616.8	3883.3	4704.9	4240.8
75°	269.1	274.3	313.3	397.8	510.9	486.2	505.7	1917.6	2302.4	3772.8	3844.3
77.5°	218.4	223.6	252.2	317.2	453.7	378.3	397.8	794.3	981.5	2561.1	3142.2
80°	156.0	161.2	193.7	247.0	343.2	340.6	295.1	438.1	475.8	1384.6	2041.1
82.5°	111.8	115.7	146.9	176.8	237.9	341.9	222.3	297.7	312.0	613.6	822.9
85°	75.4	75.4	101.4	117.0	153.4	215.8	179.4	201.5	210.6	291.2	222.3
87.5°	32.5	32.5	54.6	59.8	80.6	100.1	133.9	101.4	104.0	157.3	91.0
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°	1248.1	1248.1	1248.1	1248.1	1248.1	1248.1	1248.1	1248.1	1248.1	1248.1	1248.1
2.5°	1242.9	1244.2	1246.8	1254.6	1259.8	1267.6	1271.5	1276.7	1276.7	1274.1	1275.4
5°	1240.3	1244.2	1253.3	1267.6	1276.7	1291.0	1301.4	1309.2	1311.8	1309.2	1310.5
7.5°	1239.0	1245.5	1261.1	1281.9	1294.9	1313.1	1327.4	1336.5	1343.0	1340.4	1341.7
10°	1235.1	1245.5	1265.0	1291.0	1310.5	1328.7	1341.7	1345.6	1349.5	1346.9	1345.6
12.5°	1240.3	1252.0	1272.8	1304.0	1326.1	1340.4	1344.3	1337.8	1328.7	1323.5	1322.2
15°	1250.7	1262.4	1283.2	1315.7	1335.2	1340.4	1331.3	1310.5	1289.7	1278.0	1276.7
17.5°	1265.0	1272.8	1289.7	1318.3	1333.9	1327.4	1309.2	1284.5	1268.9	1259.8	1261.1
20°	1274.1	1274.1	1287.1	1309.2	1322.2	1317.0	1294.9	1267.6	1242.9	1231.2	1227.3
22.5°	1287.1	1280.6	1281.9	1301.4	1319.6	1311.8	1265.0	1216.9	1181.8	1168.8	1167.5
25°	1322.2	1304.0	1292.3	1304.0	1346.9	1283.2	1189.6	1133.6	1101.1	1089.4	1090.7
27.5°	1365.1	1340.4	1315.7	1335.2	1369.0	1218.2	1093.3	1029.6	1010.1	1001.0	1004.9
30°	1408.0	1375.5	1343.0	1413.2	1353.4	1116.7	969.8	907.4	890.5	884.0	889.2
32.5°	1487.3	1434.0	1395.0	1517.2	1305.3	1001.0	835.9	778.7	763.1	755.3	752.7
35°	1619.9	1552.3	1513.3	1608.2	1237.7	872.3	713.7	673.4	656.5	639.6	637.0
37.5°	1811.0	1729.1	1694.0	1660.2	1142.7	744.9	620.1	592.8	568.1	542.1	540.8
40°	2039.8	1933.2	1907.2	1683.6	1011.4	625.3	555.1	529.1	497.9	473.2	474.5
42.5°	2303.7	2167.2	2111.3	1677.1	848.9	561.6	508.3	479.7	452.4	430.3	429.0
45°	2585.8	2431.1	2302.4	1631.6	687.7	517.4	479.7	445.9	418.6	393.9	391.3
47.5°	2897.8	2724.9	2479.2	1543.2	568.1	486.2	462.8	414.7	390.0	374.4	374.4
50°	3212.4	3005.7	2641.7	1409.3	497.9	462.8	438.1	397.8	378.3	365.3	365.3
52.5°	3481.6	3298.2	2775.6	1249.4	453.7	443.3	421.2	390.0	369.2	357.5	356.2
55°	3742.9	3570.0	2895.2	1090.7	417.3	417.3	417.3	383.5	360.1	349.7	348.4
57.5°	4002.9	3856.0	3020.0	986.7	384.8	395.2	409.5	375.7	352.3	343.2	341.9
60°	4296.7	4199.2	3164.3	913.9	356.2	371.8	399.1	366.6	339.3	331.5	330.2
62.5°	4608.7	4608.7	3295.6	811.2	330.2	352.3	383.5	354.9	327.6	321.1	319.8
65°	4853.1	4958.4	3380.1	657.8	304.2	332.8	365.3	339.3	312.0	310.7	308.1
67.5°	4881.7	5046.8	3326.8	496.6	280.8	312.0	347.1	322.4	296.4	296.4	292.5
70°	4676.3	4844.0	3160.4	371.8	263.9	291.2	323.7	301.6	276.9	279.5	273.0
72.5°	4333.1	4374.7	2747.0	293.8	244.4	269.1	295.1	278.2	256.1	256.1	247.0
75°	3880.7	3649.3	1995.6	245.7	221.0	243.1	266.5	252.2	232.7	226.2	221.0
77.5°	3088.9	2644.3	1159.7	211.9	201.5	218.4	234.0	223.6	206.7	192.4	192.4
80°	1882.5	1549.7	512.2	183.3	178.1	191.1	201.5	189.8	175.5	161.2	157.3
82.5°	716.3	598.0	248.3	157.3	156.0	163.8	171.6	159.9	149.5	143.0	123.5
85°	196.3	180.7	170.3	131.3	128.7	127.4	136.5	131.3	117.0	96.2	85.8
87.5°	74.1	84.5	92.3	80.6	85.8	79.3	91.0	83.2	74.1	48.1	42.9
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)