

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: P265977

Luminaire Tested: **ARCH-AF24-90-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265977
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-AF24-90-D-U-T2R-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8575.2 lumens
Efficiency: N/A
Efficacy: 91.2 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 - G2

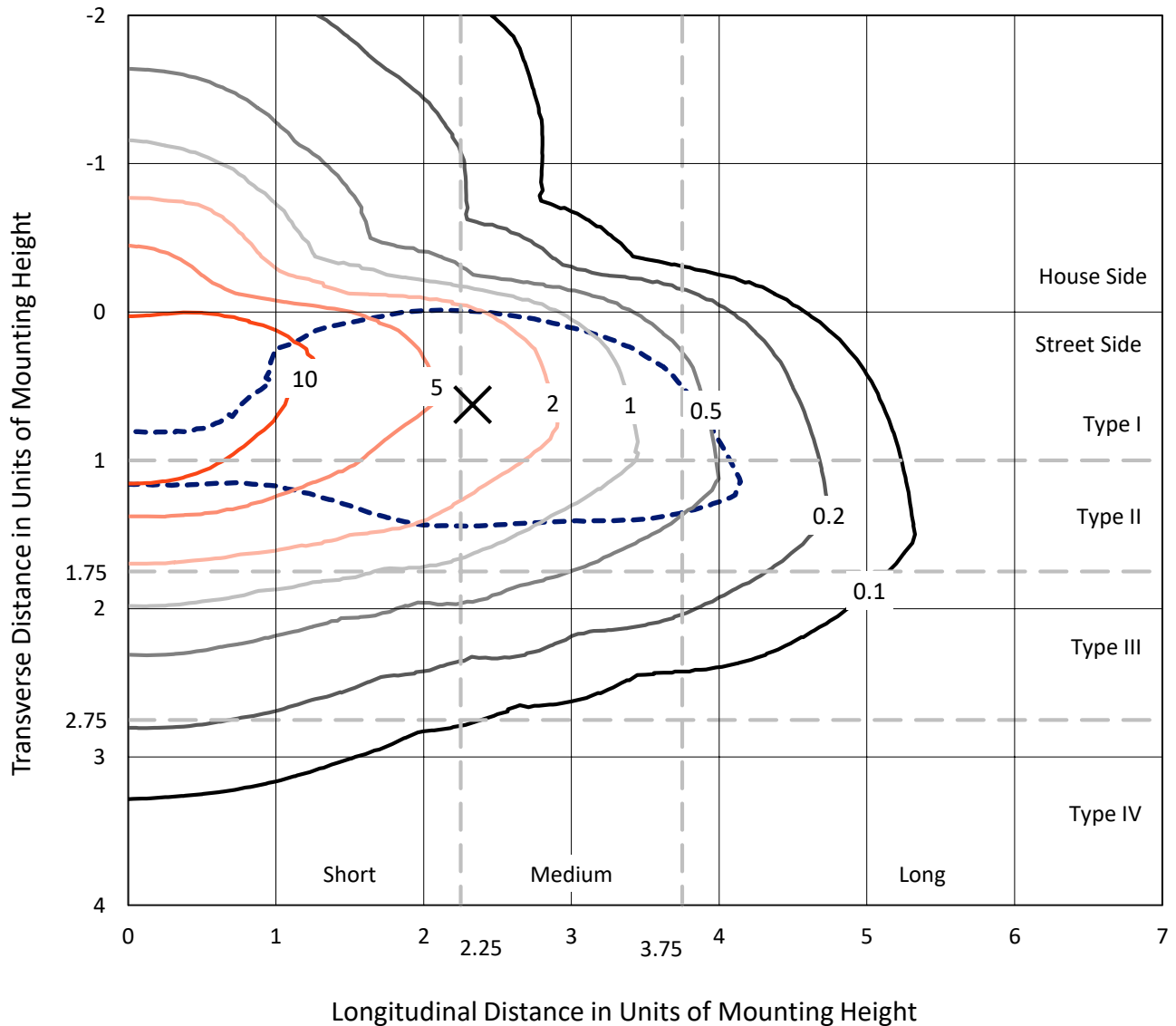
Input Watts (W): 94
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

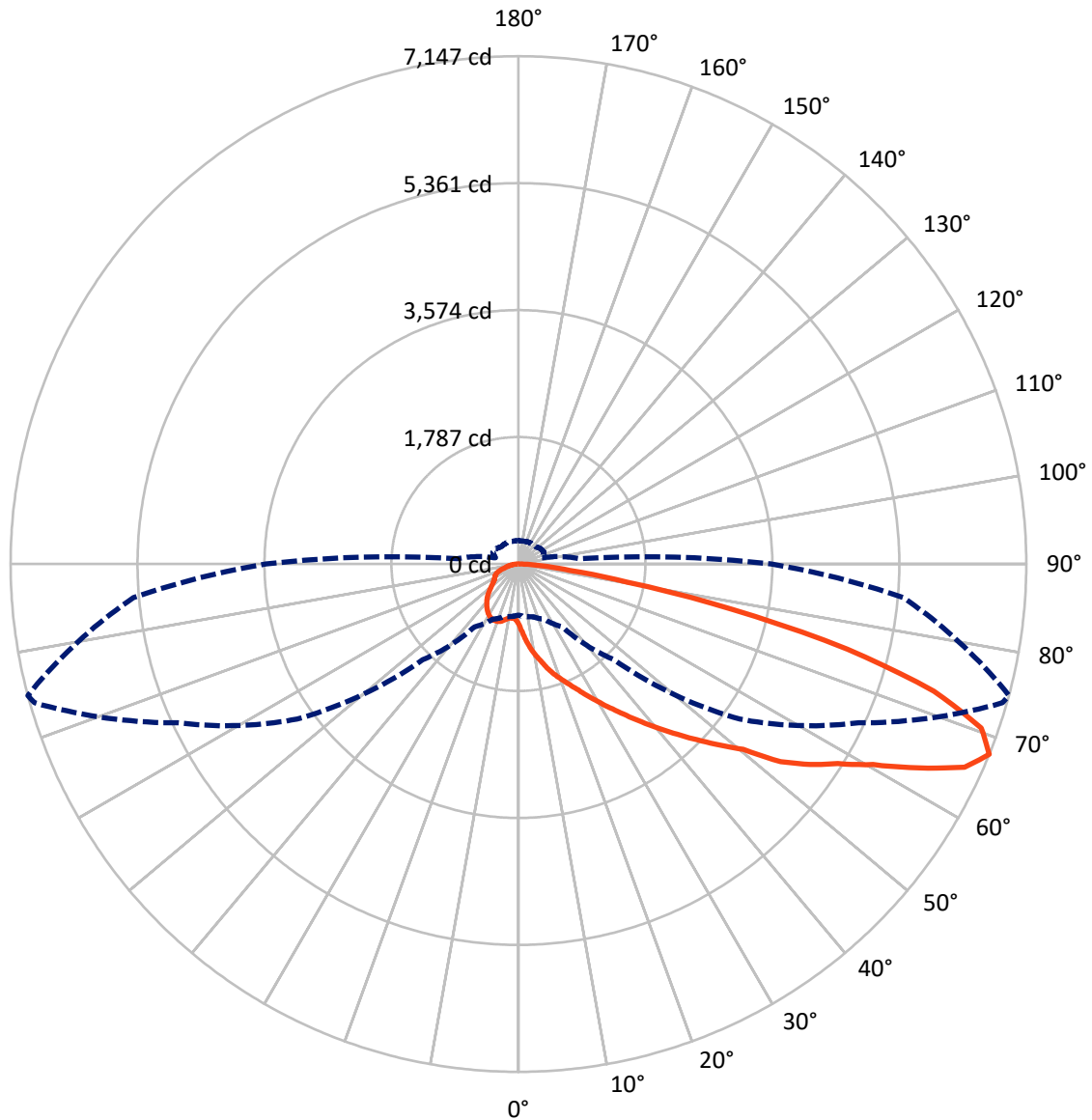
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 17.8 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	1464.3	0.0	1464.3
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	7110.9	0.0	7110.9
	% Fixture	82.9	0.0	82.9
Total	Lumens	8575.2	0.0	8575.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.8	1.2
10°-20°	360.8	4.2
20°-30°	658.0	7.7
30°-40°	1080.0	12.6
40°-50°	1561.9	18.2
50°-60°	1840.7	21.5
60°-70°	1788.7	20.9
70°-80°	994.3	11.6
80°-90°	191.2	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°	8575.2	100.0
0°-180°	8575.2	100.0



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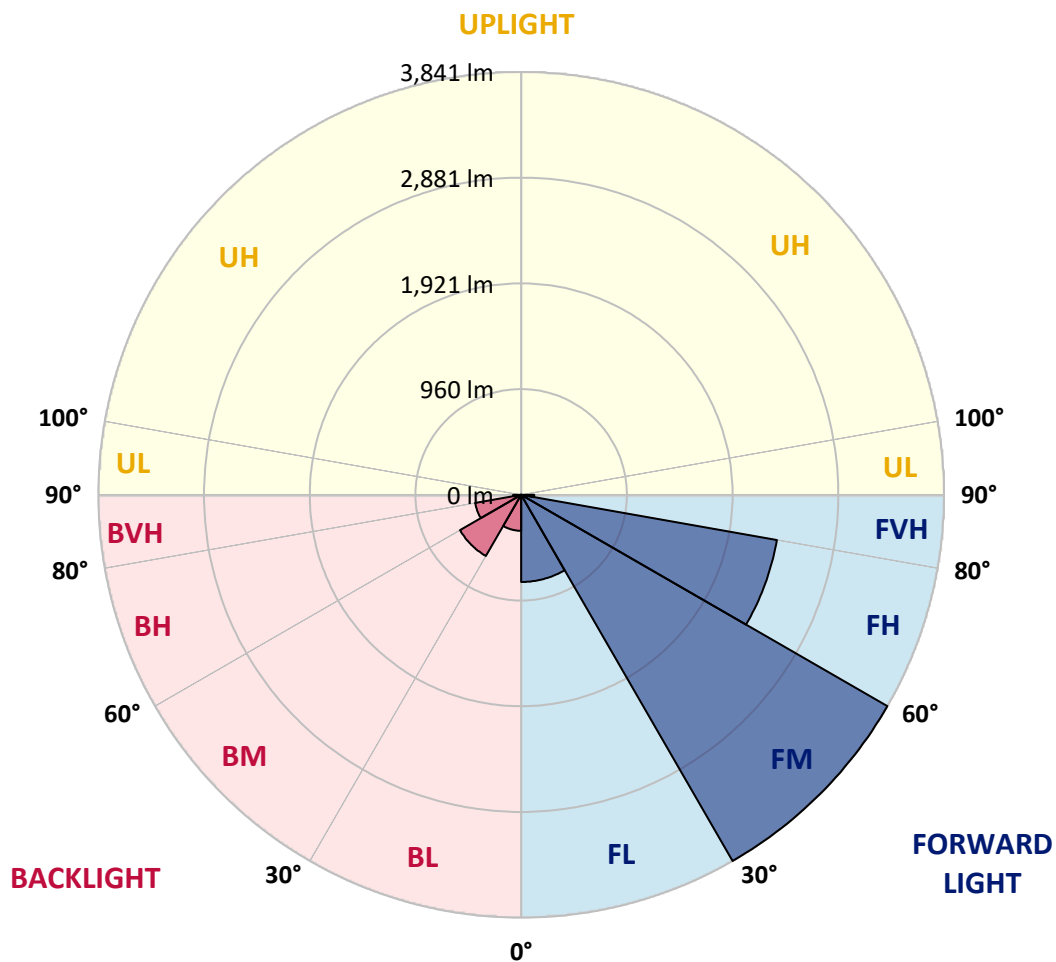
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	791.7	9.2			
FM (30°-60°)	3841.2	44.8			
FH (60°-80°)	2358.9	27.5			G2/5000
FVH (80°-90°)	119.0	1.4			G2/225
BL (0°-30°)	326.8	3.8	B1/500		
BM (30°-60°)	641.3	7.5	B1/1000		
BH (60°-80°)	424.0	4.9	B1/500		G1/500
BVH (80°-90°)	72.2	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-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	849.7	849.7	849.7	849.7	849.7	849.7	849.7	849.7	849.7	849.7	849.7
2.5°	1204.6	1208.2	1201.0	1185.0	1161.7	1118.6	1081.0	1014.6	955.4	948.3	885.5
5°	1416.2	1419.9	1410.8	1391.0	1366.1	1319.4	1267.4	1181.4	1086.3	1068.4	935.8
7.5°	1561.4	1563.2	1552.5	1532.7	1512.9	1466.5	1414.4	1317.6	1201.0	1186.8	1000.4
10°	1685.1	1688.6	1674.4	1661.8	1640.2	1593.7	1539.9	1437.6	1317.6	1298.0	1066.6
12.5°	1799.8	1803.3	1794.5	1783.7	1776.5	1733.5	1674.4	1552.5	1423.4	1401.8	1145.5
15°	1876.9	1880.5	1882.3	1896.6	1905.6	1875.1	1816.0	1683.3	1538.1	1518.3	1238.8
17.5°	1855.4	1864.3	1891.2	1943.3	1998.8	2000.6	1952.1	1812.4	1651.1	1629.5	1333.8
20°	1792.7	1799.8	1832.2	1911.0	2020.3	2083.1	2079.4	1943.3	1756.7	1733.5	1421.6
22.5°	1844.6	1853.7	1853.7	1902.0	2009.6	2126.1	2172.7	2072.3	1862.5	1841.0	1509.4
25°	2066.9	2072.3	2034.8	2015.0	2054.3	2162.0	2249.7	2212.2	1991.6	1966.5	1604.5
27.5°	2377.1	2368.1	2321.5	2242.6	2199.6	2228.2	2317.8	2344.8	2140.4	2109.9	1703.0
30°	2685.5	2680.1	2626.3	2520.5	2423.6	2362.7	2393.2	2463.2	2301.7	2266.0	1798.0
32.5°	2974.0	2965.0	2905.8	2782.2	2672.8	2559.9	2500.7	2570.7	2473.8	2432.6	1903.8
35°	3239.3	3216.0	3156.9	3027.7	2914.9	2807.4	2662.0	2672.8	2660.3	2617.3	2020.3
37.5°	3454.4	3436.6	3372.0	3251.9	3131.9	3029.5	2877.2	2789.3	2861.1	2819.9	2154.8
40°	3644.5	3624.8	3558.5	3438.4	3327.1	3230.3	3110.2	2931.0	3086.9	3040.4	2305.4
42.5°	3788.0	3773.5	3719.7	3601.5	3493.9	3406.1	3346.8	3110.2	3321.8	3276.9	2470.2
45°	3865.0	3850.7	3822.0	3726.9	3628.3	3560.3	3565.6	3323.5	3567.3	3529.7	2665.7
47.5°	3769.9	3780.6	3805.8	3788.0	3726.9	3694.6	3761.1	3544.1	3841.6	3805.8	2877.2
50°	3515.3	3526.1	3626.5	3750.2	3771.8	3811.1	3936.6	3798.7	4132.1	4103.4	3138.9
52.5°	2889.8	2949.0	3226.8	3522.6	3725.1	3888.3	4132.1	4176.8	4621.5	4621.5	3601.5
55°	2183.5	2235.4	2552.8	3069.0	3544.1	3895.4	4275.6	4433.2	4974.6	4981.8	3843.5
57.5°	1769.3	1801.6	1957.5	2486.4	3164.0	3805.8	4445.8	4653.7	5268.6	5300.9	4155.4
60°	1435.9	1453.8	1556.0	1923.5	2638.9	3563.8	4567.7	4969.2	5688.1	5733.0	4553.4
62.5°	1154.5	1172.4	1240.5	1461.1	2070.6	3110.2	4546.2	5297.2	6247.4	6321.0	5075.1
65°	921.4	941.2	986.0	1122.3	1534.6	2547.4	4325.7	5465.7	6826.4	6898.2	5421.0
67.5°	718.9	736.8	767.2	857.0	1081.0	1905.6	3804.1	5288.3	7086.4	7147.4	5438.9
70°	543.1	552.2	577.3	634.7	772.6	1265.6	2977.6	4693.1	6853.3	6909.0	5080.4
72.5°	421.2	419.5	433.8	462.4	539.6	871.3	1973.8	3816.5	6059.2	6116.5	4334.6
75°	344.2	342.4	351.3	360.3	390.9	584.3	1165.2	2873.6	4890.4	4781.0	3251.9
77.5°	290.4	288.6	297.6	299.3	311.9	403.3	663.3	1891.2	3262.6	3074.4	1832.2
80°	245.5	243.8	254.6	258.2	267.1	295.8	381.8	1023.6	1638.5	1552.5	874.8
82.5°	184.6	191.8	211.6	220.5	231.3	218.6	236.7	451.8	760.1	726.0	380.1
85°	89.7	105.8	159.5	177.4	190.0	138.0	161.3	213.3	342.4	326.3	154.1
87.5°	30.5	26.9	95.0	112.9	123.6	62.7	89.7	118.2	141.7	129.0	48.4
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°	849.7	849.7	849.7	849.7	849.7	849.7	849.7	849.7	849.7	849.7	849.7
2.5°	858.7	831.8	792.3	761.9	742.2	726.0	718.9	717.0	713.4	711.6	711.6
5°	876.6	828.1	767.2	735.1	726.0	718.9	722.4	724.3	724.3	724.3	724.3
7.5°	903.4	835.3	761.9	740.4	738.5	738.5	749.4	754.7	758.3	758.3	758.3
10°	939.4	847.9	770.8	752.9	758.3	761.9	774.3	781.5	785.2	786.9	788.8
12.5°	987.7	874.8	788.8	774.3	781.5	783.4	792.3	796.0	799.5	801.3	801.3
15°	1052.3	914.2	817.5	799.5	801.3	799.5	799.5	796.0	794.1	794.1	797.8
17.5°	1118.6	951.9	842.5	817.5	810.4	796.0	785.2	776.2	770.8	767.2	769.0
20°	1185.0	986.0	857.0	821.1	801.3	778.0	758.3	745.8	738.5	731.4	735.1
22.5°	1251.2	1018.1	862.3	810.4	781.5	747.5	726.0	706.2	690.2	679.4	681.3
25°	1324.8	1054.2	862.3	797.8	754.7	718.9	692.0	659.6	636.4	627.5	631.0
27.5°	1398.3	1084.6	853.3	774.3	724.3	688.5	648.9	611.2	597.0	591.5	593.4
30°	1471.8	1107.9	833.5	745.8	692.0	652.4	600.5	575.5	557.5	543.1	544.9
32.5°	1545.3	1124.0	806.7	709.9	657.9	607.8	564.7	536.0	503.7	485.9	487.6
35°	1629.5	1136.5	774.3	674.1	620.3	568.3	536.0	489.3	455.4	441.0	437.5
37.5°	1717.4	1145.5	740.4	634.7	582.6	539.6	507.4	450.0	417.7	397.9	396.2
40°	1812.4	1149.1	699.2	593.4	546.8	521.6	469.6	426.6	371.1	358.6	358.6
42.5°	1925.2	1147.2	657.9	552.2	507.4	480.5	442.8	423.0	374.7	362.0	354.9
45°	2054.3	1147.2	613.2	503.7	467.8	428.4	412.3	399.7	367.4	372.8	376.5
47.5°	2201.3	1143.7	559.4	464.3	435.6	401.5	392.6	365.7	353.2	356.7	360.3
50°	2404.0	1149.1	510.9	432.1	412.3	383.7	372.8	358.6	353.2	354.9	353.2
52.5°	2685.5	1131.1	464.3	412.3	394.4	356.7	356.7	354.9	356.7	354.9	354.9
55°	2839.5	1091.7	430.3	401.5	381.8	344.2	351.3	354.9	358.6	356.7	356.7
57.5°	3058.3	1064.9	403.3	394.4	374.7	340.5	347.7	354.9	356.7	354.9	354.9
60°	3316.5	1047.0	385.5	396.2	369.4	340.5	349.6	354.9	353.2	351.3	351.3
62.5°	3615.8	1039.8	372.8	401.5	364.0	342.4	349.6	354.9	347.7	345.9	345.9
65°	3728.8	975.2	356.7	405.1	367.4	342.4	347.7	349.6	340.5	338.8	337.0
67.5°	3554.9	864.1	333.5	397.9	378.2	342.4	342.4	340.5	329.9	328.1	324.5
70°	3165.8	717.0	297.6	374.7	385.5	344.2	335.2	326.3	315.6	315.6	308.4
72.5°	2592.1	564.7	250.9	333.5	380.1	349.6	320.9	308.4	295.8	295.8	288.6
75°	1867.9	421.2	200.9	277.8	356.7	347.7	303.0	286.7	272.5	270.7	261.8
77.5°	1064.9	295.8	163.1	216.9	317.3	338.8	286.7	261.8	245.5	240.1	234.8
80°	546.8	199.0	132.7	170.3	263.6	313.7	274.3	233.0	215.1	206.2	197.2
82.5°	259.9	132.7	102.1	125.6	199.0	274.3	258.2	200.9	181.1	170.3	159.5
85°	116.5	79.0	68.1	80.7	141.7	213.3	227.7	164.8	141.7	177.4	130.9
87.5°	37.6	35.8	35.8	37.6	68.1	93.2	166.7	121.9	112.9	93.2	79.0
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)