

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: P397843

Luminaire Tested: **ARCH-S-PA1-50-740-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397843
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-50-740-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7912 lumens
Efficiency: N/A
Efficacy: 146.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

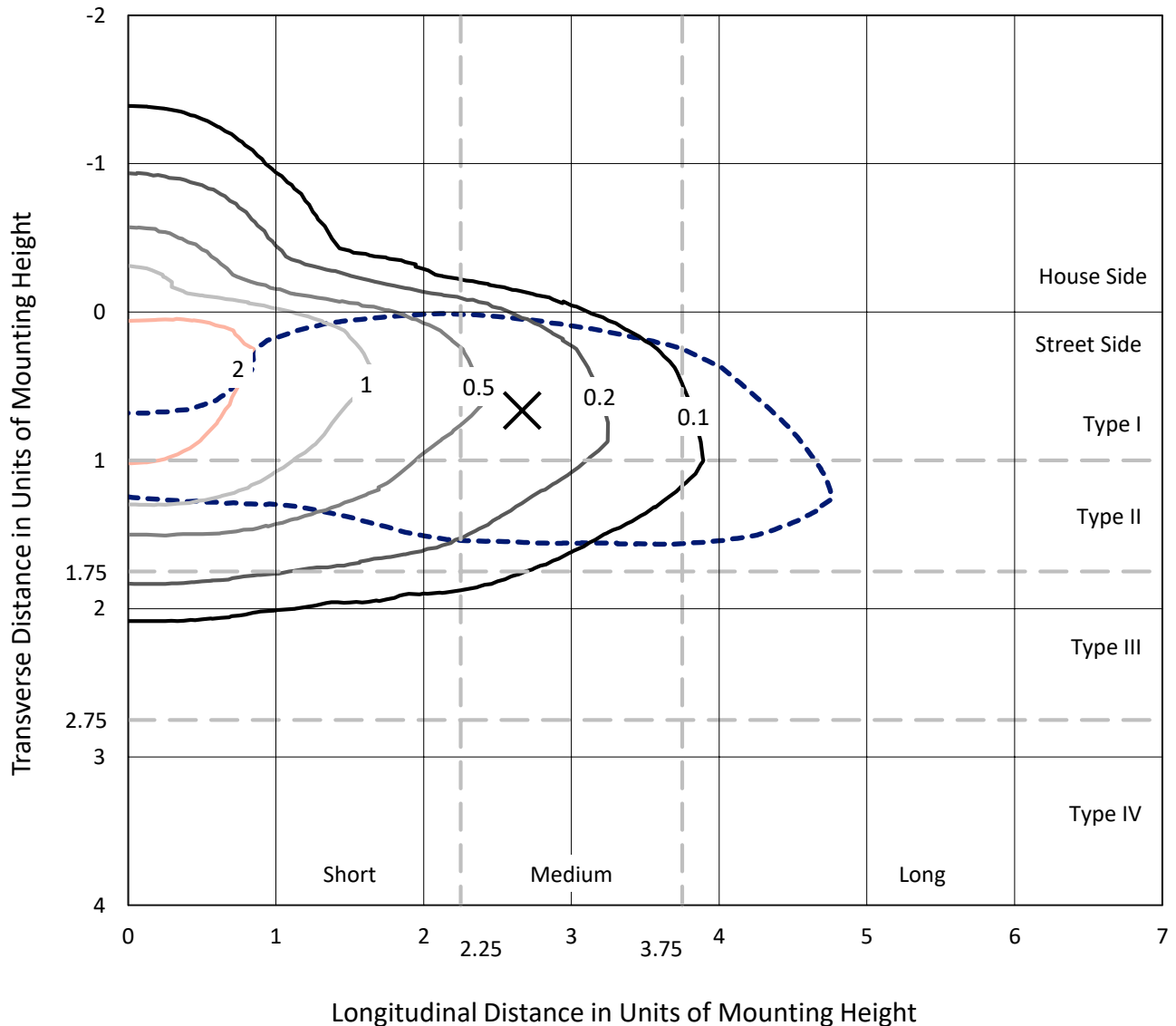
Input Watts (W): 54
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

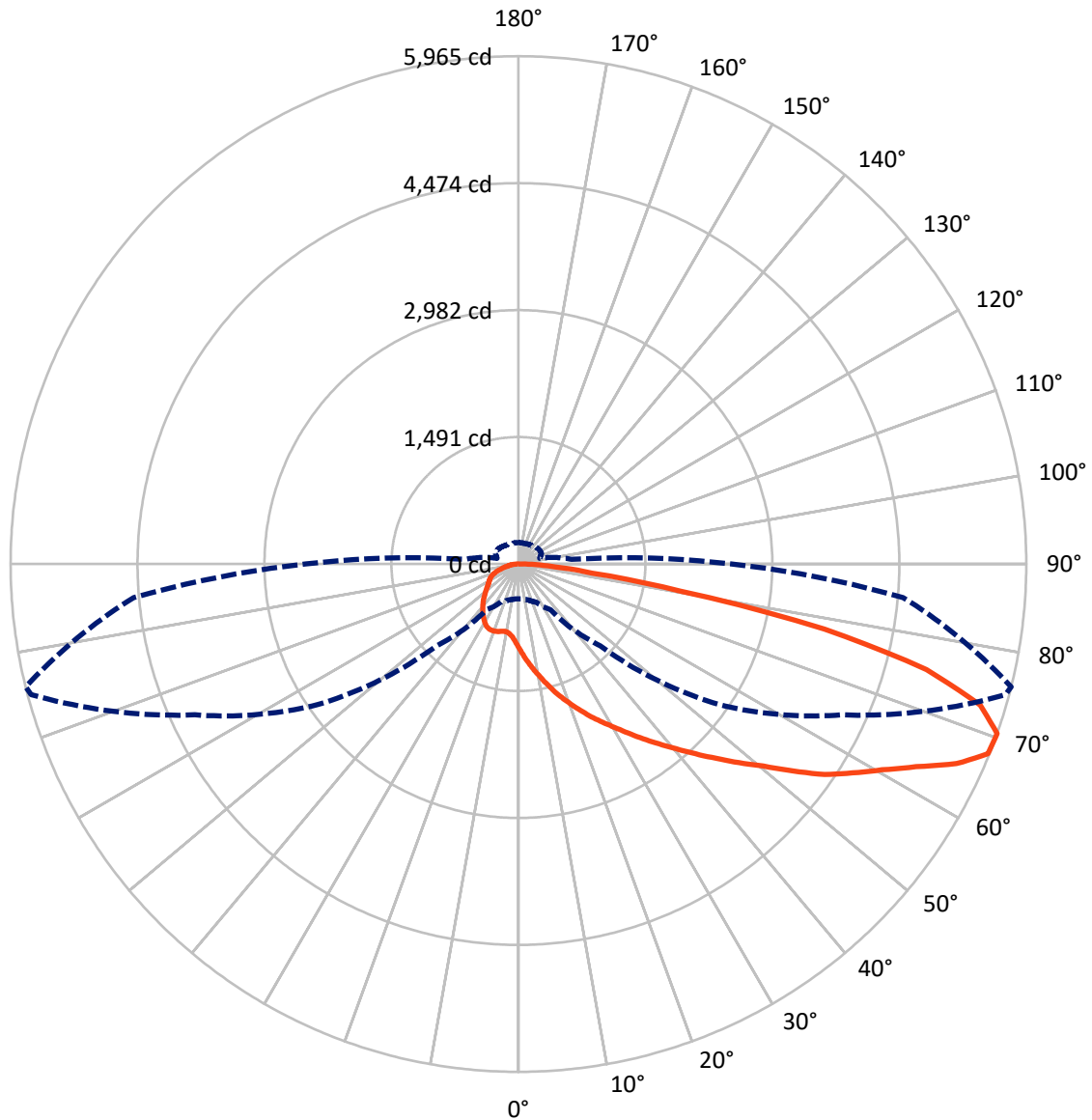


Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type II - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1291.7	0.0	1291.7
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	6620.3	0.0	6620.3
	% Fixture	83.7	0.0	83.7
Total	Lumens	7912.0	0.0	7912.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.8	1.3
10°-20°	349.4	4.4
20°-30°	625.1	7.9
30°-40°	1011.2	12.8
40°-50°	1462.9	18.5
50°-60°	1674.4	21.2
60°-70°	1540.2	19.5
70°-80°	952.5	12.0
80°-90°	193.4	2.4
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°	7912.0	100.0
0°-180°	7912.0	100.0



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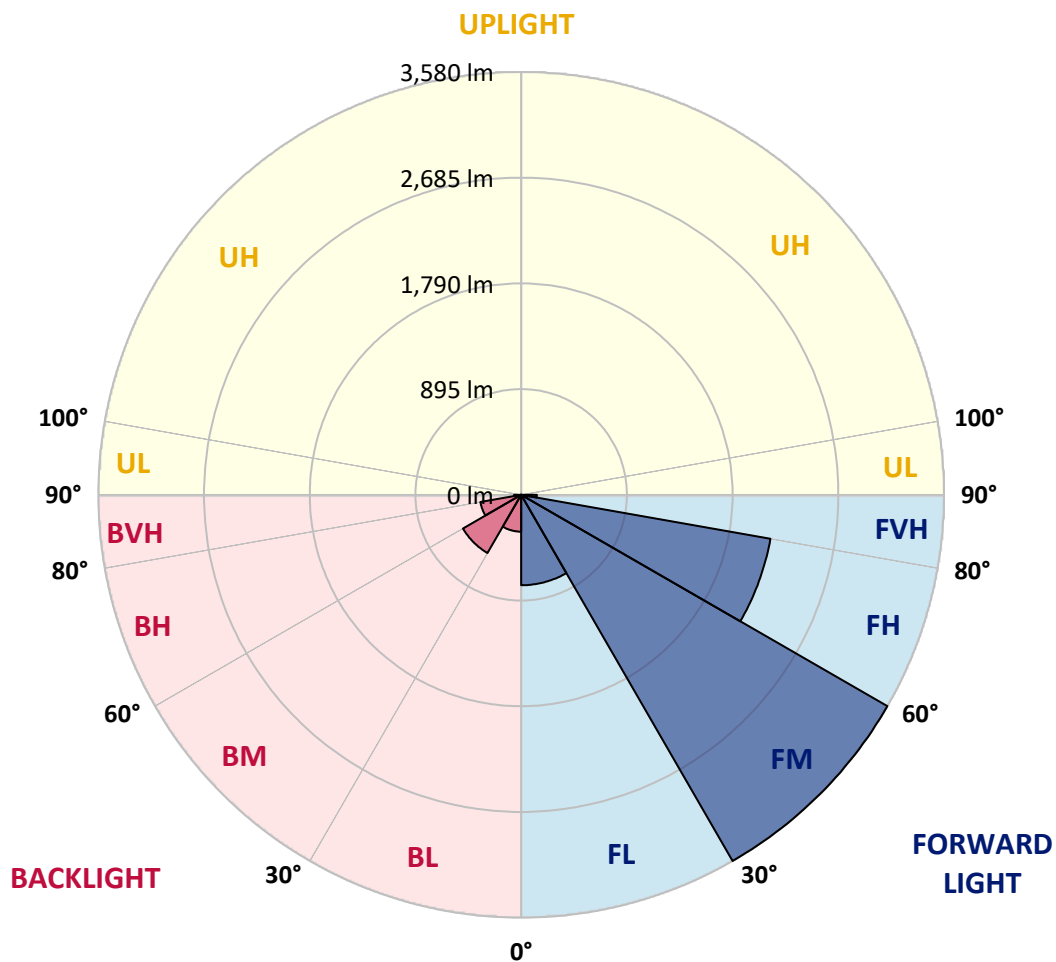
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	765.4	9.7			
FM (30°-60°)	3579.8	45.2			
FH (60°-80°)	2142.4	27.1			G2/5000
FVH (80°-90°)	132.8	1.7			G2/225
BL (0°-30°)	312.0	3.9	B1/500		
BM (30°-60°)	568.7	7.2	B1/1000		
BH (60°-80°)	350.4	4.4	B1/500		G1/500
BVH (80°-90°)	60.6	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°	75°	76°	85°
0°	989.4	989.4	989.4	989.4	989.4	989.4	989.4	989.4	989.4	989.4	989.4
2.5°	1261.0	1251.6	1250.6	1236.0	1222.5	1186.1	1160.1	1114.3	1068.5	1067.5	1021.7
5°	1457.6	1448.3	1443.0	1425.4	1402.5	1354.6	1307.8	1237.0	1159.0	1153.8	1067.5
7.5°	1590.8	1582.5	1572.1	1564.8	1542.9	1500.3	1443.0	1358.8	1251.6	1241.2	1120.5
10°	1680.3	1675.1	1673.0	1667.8	1654.3	1619.9	1564.8	1475.3	1344.2	1332.8	1176.7
12.5°	1718.8	1716.7	1726.0	1740.6	1745.8	1732.3	1679.2	1594.9	1446.2	1433.7	1244.3
15°	1674.0	1676.1	1700.0	1750.0	1803.0	1832.2	1800.9	1718.8	1561.7	1544.0	1323.4
17.5°	1653.2	1656.3	1673.0	1720.8	1795.7	1886.3	1900.8	1836.3	1673.0	1648.0	1406.6
20°	1689.6	1693.8	1706.3	1743.7	1795.7	1892.5	1968.5	1948.7	1782.2	1756.2	1486.7
22.5°	1782.2	1787.4	1786.4	1810.3	1845.7	1912.3	2005.9	2054.8	1896.7	1867.5	1570.0
25°	1979.9	1975.7	1940.4	1928.9	1938.3	1980.9	2055.8	2156.8	2016.3	1987.2	1657.4
27.5°	2248.3	2243.1	2178.6	2120.4	2068.3	2087.1	2126.6	2239.0	2138.0	2104.7	1740.6
30°	2535.5	2529.2	2454.3	2359.6	2244.2	2217.1	2211.9	2310.7	2260.8	2225.4	1829.0
32.5°	2815.3	2810.1	2730.0	2619.8	2460.6	2379.4	2329.5	2390.9	2400.2	2365.9	1925.8
35°	3070.2	3070.2	3001.6	2870.5	2690.5	2567.7	2485.5	2489.7	2560.4	2520.9	2036.1
37.5°	3297.1	3296.0	3221.1	3092.1	2919.4	2778.9	2677.0	2609.3	2713.4	2679.1	2151.6
40°	3477.0	3469.8	3414.6	3302.3	3128.5	2989.1	2886.1	2749.8	2884.0	2852.8	2274.3
42.5°	3608.1	3604.0	3566.5	3468.7	3303.3	3172.2	3101.5	2926.7	3077.5	3046.3	2417.9
45°	3659.1	3667.4	3667.4	3574.8	3443.8	3324.1	3292.9	3121.2	3286.7	3255.4	2571.9
47.5°	3576.9	3598.8	3643.5	3649.8	3534.3	3453.1	3463.5	3316.8	3502.0	3485.4	2740.4
50°	3319.9	3360.5	3458.3	3635.2	3570.7	3552.0	3609.2	3516.6	3733.0	3727.8	2945.4
52.5°	2657.2	2756.0	3060.9	3378.2	3545.7	3597.7	3753.8	3741.3	4030.5	4038.9	3212.8
55°	2038.2	2075.6	2428.3	2968.3	3392.8	3583.2	3850.6	3960.8	4353.1	4363.5	3458.3
57.5°	1648.0	1673.0	1865.5	2428.3	3044.2	3504.1	3926.5	4088.8	4600.7	4627.7	3676.8
60°	1305.7	1342.1	1471.1	1858.2	2556.3	3313.7	3979.6	4231.3	4867.0	4907.6	3938.0
62.5°	970.7	988.4	1110.1	1376.5	2023.6	2971.4	3951.5	4386.4	5193.7	5242.6	4252.2
65°	690.8	706.4	792.8	979.0	1496.1	2508.4	3788.1	4501.9	5603.6	5653.6	4568.4
67.5°	517.1	523.3	572.2	684.6	1008.2	1948.7	3457.3	4482.1	5903.3	5948.0	4695.4
70°	408.9	411.0	434.9	495.2	655.5	1356.7	2877.8	4191.8	5925.1	5964.7	4535.1
72.5°	339.2	338.1	351.7	380.8	456.7	858.3	2131.8	3652.9	5644.2	5671.3	4087.8
75°	279.9	282.0	291.3	308.0	348.5	566.0	1381.7	2914.2	4979.4	4950.3	3430.2
77.5°	235.1	234.1	238.3	252.8	282.0	406.8	809.4	2105.8	3690.3	3675.8	2251.4
80°	189.4	191.4	197.7	210.2	237.2	310.0	478.6	1314.0	1979.9	1926.8	1075.8
82.5°	126.9	146.7	159.2	173.7	205.0	228.9	303.8	667.9	885.4	871.9	488.0
85°	60.3	80.1	118.6	135.3	166.5	143.6	206.0	318.4	443.2	438.0	175.8
87.5°	12.5	12.5	63.5	75.9	103.0	61.4	114.4	138.4	214.3	200.8	71.8
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°	989.4	989.4	989.4	989.4	989.4	989.4	989.4	989.4	989.4	989.4	989.4
2.5°	994.6	966.5	910.4	865.6	819.8	793.8	761.6	746.0	742.9	734.5	740.8
5°	1012.3	957.2	851.1	781.3	734.5	711.6	700.2	696.0	695.0	692.9	692.9
7.5°	1036.2	952.0	813.6	742.9	712.7	705.4	708.5	714.8	715.8	717.9	716.8
10°	1065.4	953.0	792.8	733.5	718.9	720.0	730.4	738.7	742.9	746.0	744.9
12.5°	1106.0	965.5	789.7	739.7	733.5	737.7	748.1	756.4	760.5	761.6	761.6
15°	1159.0	991.5	797.0	753.3	748.1	751.2	757.4	760.5	761.6	760.5	760.5
17.5°	1217.3	1022.7	807.4	761.6	753.3	750.1	748.1	744.9	738.7	734.5	734.5
20°	1273.5	1050.8	812.6	760.5	746.0	733.5	721.0	705.4	695.0	686.7	686.7
22.5°	1329.6	1076.8	812.6	749.1	726.2	702.3	676.3	651.3	635.7	625.3	625.3
25°	1388.9	1101.8	806.3	729.3	695.0	660.7	625.3	594.1	578.5	568.1	566.0
27.5°	1438.9	1116.4	789.7	701.2	656.5	612.8	572.2	540.0	528.5	519.2	519.2
30°	1491.9	1125.7	758.5	664.8	612.8	562.9	521.2	495.2	482.8	469.2	468.2
32.5°	1551.3	1132.0	723.1	626.3	568.1	515.0	479.6	458.8	431.8	417.2	415.1
35°	1619.9	1140.3	685.6	582.6	523.3	475.5	454.7	420.3	394.3	381.8	380.8
37.5°	1692.7	1146.5	645.1	544.1	482.8	449.5	428.6	388.1	365.2	346.5	344.4
40°	1769.7	1146.5	603.4	506.7	450.5	438.0	398.5	362.1	323.6	314.2	312.1
42.5°	1855.1	1144.5	561.8	470.3	420.3	412.0	380.8	342.3	322.5	314.2	312.1
45°	1945.6	1137.2	522.3	428.6	389.1	372.5	348.5	338.1	329.8	329.8	329.8
47.5°	2048.6	1130.9	477.5	391.2	366.2	347.5	329.8	323.6	322.5	325.6	328.8
50°	2180.7	1128.8	440.1	364.1	348.5	326.7	324.6	319.4	320.4	320.4	320.4
52.5°	2340.9	1110.1	404.7	344.4	330.9	304.8	311.1	316.3	318.4	317.3	316.3
55°	2458.5	1076.8	374.5	330.9	318.4	296.5	304.8	313.2	315.2	312.1	312.1
57.5°	2564.6	1030.0	350.6	320.4	310.0	291.3	300.7	309.0	306.9	305.9	304.8
60°	2686.3	985.3	331.9	315.2	301.7	289.2	297.6	302.8	299.6	297.6	296.5
62.5°	2818.5	941.6	318.4	315.2	295.5	288.2	294.4	296.5	290.3	288.2	288.2
65°	2879.9	872.9	303.8	315.2	292.4	286.1	288.2	286.1	279.9	279.9	278.8
67.5°	2778.9	759.5	285.1	311.1	296.5	283.0	278.8	275.7	268.4	268.4	266.3
70°	2500.1	624.2	258.0	297.6	297.6	282.0	266.3	259.1	250.7	253.9	249.7
72.5°	2136.0	495.2	224.7	274.7	291.3	280.9	252.8	241.4	234.1	237.2	231.0
75°	1730.2	383.9	185.2	238.3	275.7	275.7	239.3	223.7	215.4	215.4	208.1
77.5°	1102.8	284.0	150.9	197.7	247.6	268.4	227.8	203.9	191.4	188.3	183.1
80°	546.2	199.8	123.8	157.1	211.2	251.8	219.5	181.0	163.3	157.1	147.7
82.5°	290.3	138.4	98.8	122.8	168.5	226.8	209.1	156.1	134.2	124.8	114.4
85°	130.1	85.3	79.1	93.6	128.0	186.2	188.3	128.0	103.0	122.8	90.5
87.5°	47.9	38.5	38.5	47.9	73.9	78.0	133.2	82.2	65.5	44.7	35.4
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)