

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: P348937

Luminaire Tested: **ARCH-N-PA1-50-740-U-T2U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348937  
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-PA1-50-740-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 980mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6782 lumens  
Efficiency: N/A  
Efficacy: 130.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G2

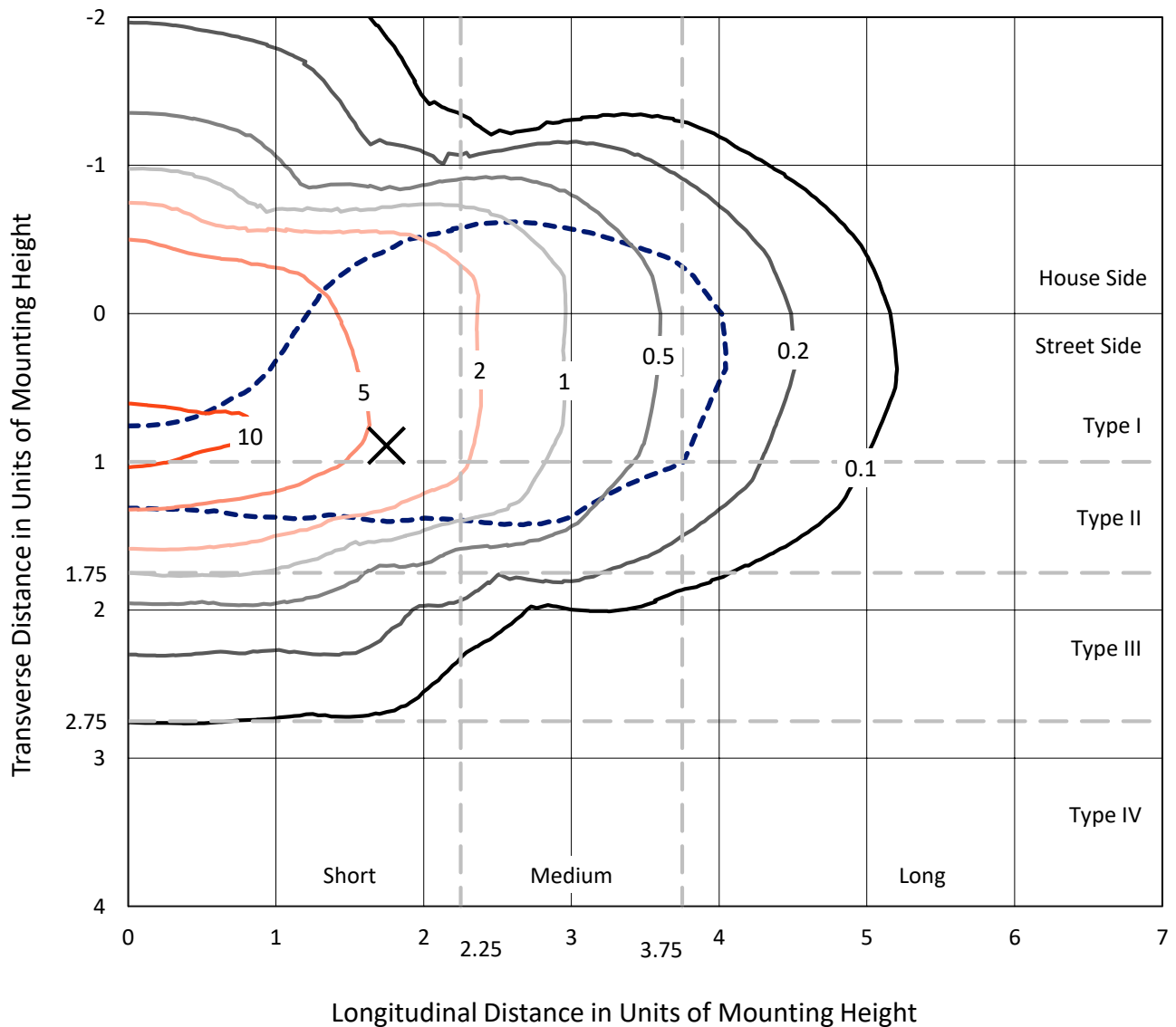
Input Watts (W): 52  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

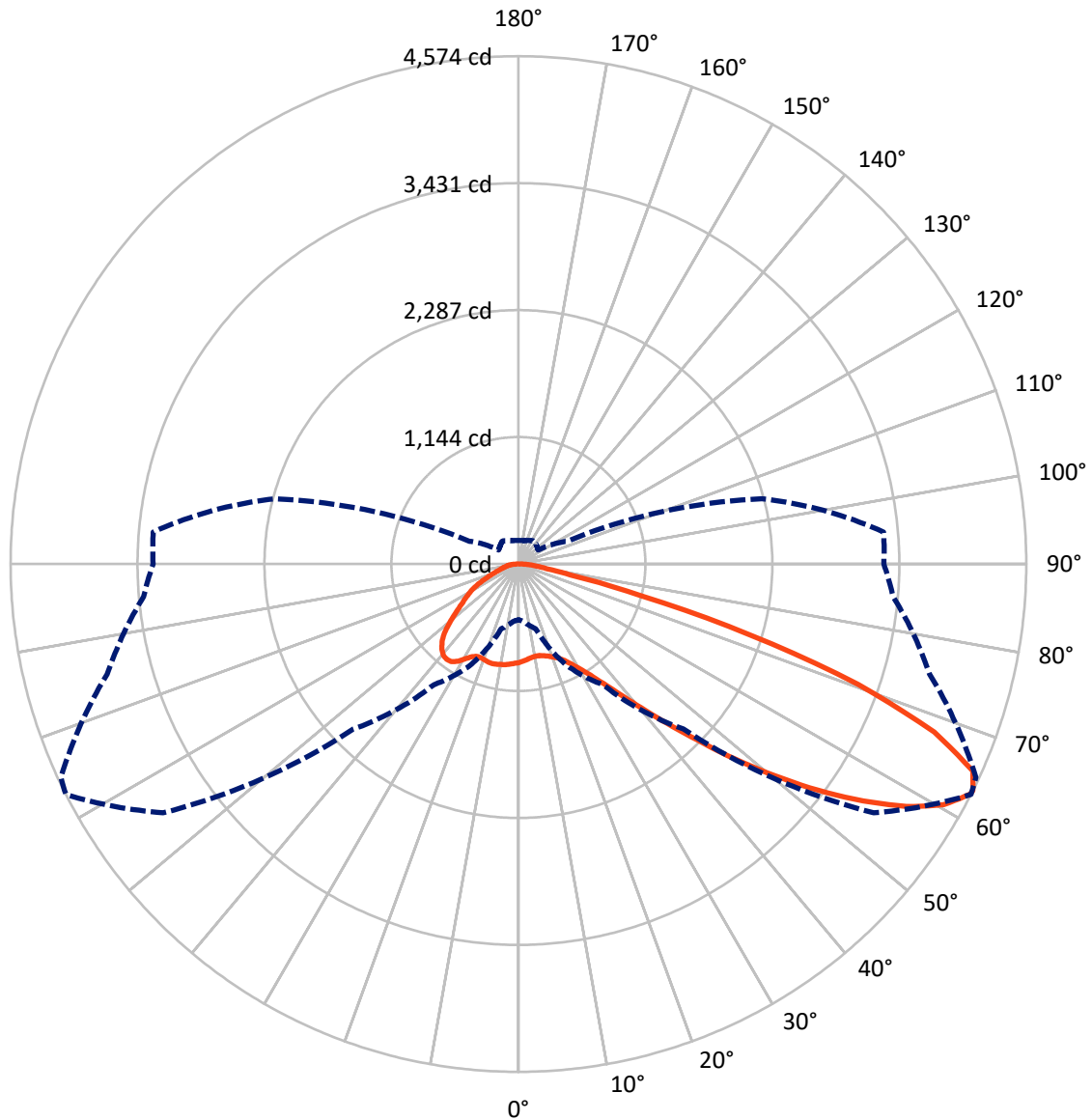
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.8 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
<b>House Side</b>	Lumens	1936.2	0.0	1936.2
	% Fixture	28.5	0.0	28.5
<b>Street Side</b>	Lumens	4845.8	0.0	4845.8
	% Fixture	71.5	0.0	71.5
<b>Total</b>	Lumens	6782.0	0.0	6782.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.2	1.2
10°-20°	248.6	3.7
20°-30°	436.6	6.4
30°-40°	735.9	10.9
40°-50°	1289.1	19.0
50°-60°	1666.2	24.6
60°-70°	1442.2	21.3
70°-80°	748.7	11.0
80°-90°	130.5	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°	6782.0	100.0
0°-180°	6782.0	100.0



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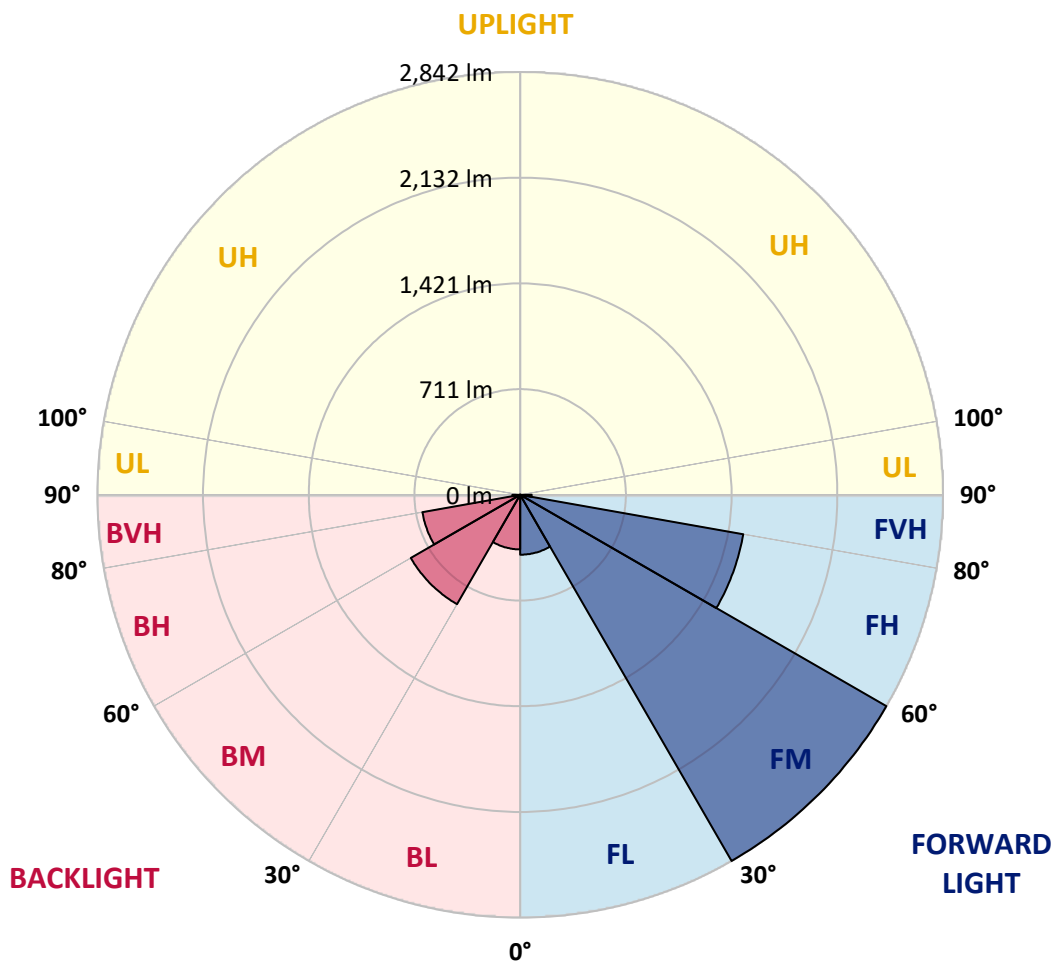
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	402.6	5.9			
FM	(30°-60°)	2842.4	41.9			
FH	(60°-80°)	1523.0	22.5			G1/1800
FVH	(80°-90°)	77.7	1.1			G1/100
BL	(0°-30°)	366.8	5.4	B1/500		
BM	(30°-60°)	848.7	12.5	B1/1000		
BH	(60°-80°)	667.9	9.8	B2/1000		G2/1000
BVH	(80°-90°)	52.8	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	888.0	888.0	888.0	888.0	888.0	888.0	888.0	888.0	888.0	888.0	888.0
2.5°	867.0	864.5	868.9	870.8	870.2	874.0	874.0	874.6	874.6	877.8	881.0
5°	841.6	840.4	844.8	848.0	850.5	856.2	860.0	861.9	863.8	868.3	875.9
7.5°	817.5	815.6	822.0	824.5	828.3	836.6	845.4	850.5	853.1	862.6	873.4
10°	797.8	797.2	802.3	804.8	809.3	821.3	834.0	844.8	846.7	859.4	869.6
12.5°	788.3	787.0	792.8	795.9	803.5	818.1	832.7	846.1	849.2	863.8	872.7
15°	795.9	797.2	802.3	802.9	811.8	827.0	843.5	856.9	860.0	874.6	881.0
17.5°	832.1	831.5	834.6	833.4	836.6	844.2	861.9	872.7	876.5	887.3	892.4
20°	897.5	895.6	898.1	889.9	875.9	872.1	882.9	894.9	896.2	902.6	899.4
22.5°	997.1	999.0	993.3	972.4	938.7	922.9	915.9	919.7	924.1	923.5	914.0
25°	1127.2	1133.6	1122.8	1086.0	1029.5	992.7	967.3	961.6	964.8	955.9	941.3
27.5°	1298.0	1303.1	1279.6	1222.5	1146.3	1091.7	1040.9	1021.3	1021.3	1002.2	975.6
30°	1485.9	1489.0	1451.6	1379.2	1291.0	1209.8	1134.9	1096.8	1093.6	1056.2	1014.3
32.5°	1714.4	1705.5	1661.0	1571.5	1460.5	1348.8	1252.3	1194.5	1188.2	1131.7	1078.4
35°	2009.5	2009.5	1917.5	1815.3	1680.1	1537.9	1411.0	1321.5	1315.1	1251.0	1181.8
37.5°	2330.0	2328.8	2245.6	2104.7	1942.9	1768.9	1599.5	1487.8	1473.2	1404.6	1327.2
40°	2649.3	2638.5	2571.2	2437.3	2264.7	2066.0	1832.4	1702.3	1695.3	1597.6	1500.5
42.5°	2882.9	2872.7	2841.0	2751.5	2637.9	2494.4	2135.2	1959.4	1949.2	1826.1	1707.4
45°	3011.7	2997.1	2992.7	2993.9	3006.6	3006.0	2509.0	2263.4	2227.8	2085.0	1927.0
47.5°	2982.5	2948.2	2993.9	3111.4	3308.8	3438.2	2944.4	2624.5	2558.5	2354.1	2161.2
50°	2747.0	2730.5	2828.3	3067.6	3473.1	3777.2	3423.6	2999.6	2906.3	2608.7	2382.7
52.5°	2333.8	2365.6	2486.2	2826.4	3443.3	3982.2	3859.0	3389.4	3259.9	2851.1	2575.0
55°	1857.8	1897.8	2067.9	2428.4	3167.2	3984.7	4173.2	3767.0	3651.5	3101.8	2771.8
57.5°	1351.9	1408.4	1621.1	1951.7	2682.9	3712.4	4328.1	4120.6	3988.5	3348.7	2964.1
60°	849.2	889.2	1120.9	1504.3	2050.8	3111.4	4289.4	4403.6	4294.5	3581.7	3183.7
62.5°	547.1	566.2	666.4	1073.9	1430.0	2281.8	4003.1	4566.1	4519.1	3794.3	3349.4
63°	501.4	517.9	603.6	992.7	1325.9	2102.2	3906.7	4574.4	4546.4	3834.3	3388.1
65°	358.6	376.4	420.8	682.3	978.7	1410.3	3347.5	4497.6	4528.7	3900.9	3440.8
67.5°	283.1	288.8	309.1	414.5	694.4	801.0	2252.6	4038.7	4175.1	3829.9	3362.7
70°	253.3	257.7	280.5	318.0	525.5	519.2	1174.9	3247.2	3529.6	3587.4	3165.9
72.5°	220.9	224.1	252.0	299.6	401.1	396.7	510.9	2183.4	2526.8	3143.1	2893.7
75°	182.8	186.0	209.5	265.9	339.6	313.5	319.9	1141.2	1448.4	2464.0	2537.6
77.5°	150.4	152.3	172.0	213.9	298.9	241.8	247.5	479.8	703.9	1679.4	2003.8
80°	109.2	109.8	128.2	162.5	228.5	218.3	184.1	261.5	319.3	920.3	1260.5
82.5°	76.2	76.8	95.8	113.6	157.4	217.7	133.9	175.2	191.7	424.0	561.1
85°	53.3	52.0	65.4	74.9	99.6	132.0	102.2	112.3	118.7	183.4	151.1
87.5°	23.5	22.8	36.8	40.0	50.1	60.9	81.2	59.0	62.8	88.9	47.6
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°	888.0	888.0	888.0	888.0	888.0	888.0	888.0	888.0	888.0	888.0	888.0
2.5°	881.6	884.2	888.0	893.7	898.1	900.0	903.8	904.5	910.2	905.1	905.7
5°	880.3	883.5	891.8	901.9	908.9	914.0	923.5	926.7	932.4	929.9	929.2
7.5°	878.4	884.2	896.2	910.8	921.6	929.9	938.7	944.5	950.2	948.9	947.6
10°	875.9	882.9	900.0	914.6	929.9	938.7	945.1	945.7	947.6	946.4	943.2
12.5°	877.8	885.4	905.1	919.7	935.6	941.9	940.0	930.5	922.2	915.3	914.0
15°	884.2	893.0	911.4	924.8	937.5	933.7	922.2	901.3	886.1	877.2	877.8
17.5°	890.5	898.1	912.1	922.9	929.2	917.8	900.0	882.2	875.3	868.3	867.0
20°	896.2	897.5	906.4	915.9	915.3	906.4	889.9	868.3	854.3	842.9	843.5
22.5°	905.1	900.0	900.7	906.4	913.4	905.1	866.4	828.9	808.0	794.7	794.0
25°	925.4	914.6	904.5	907.6	934.3	881.6	816.2	767.4	749.0	736.9	738.2
27.5°	953.3	938.7	918.4	935.6	950.2	835.3	744.5	694.4	681.7	669.0	672.2
30°	983.8	962.9	938.1	995.9	932.4	761.7	655.7	610.0	598.5	586.5	589.0
32.5°	1038.4	1007.3	974.9	1068.2	891.1	672.2	562.4	521.1	513.5	505.9	506.5
35°	1129.2	1092.3	1057.4	1123.4	837.8	578.9	478.6	449.4	443.0	434.1	434.1
37.5°	1263.1	1205.3	1186.9	1152.6	764.8	491.9	417.0	397.3	384.0	371.9	371.9
40°	1418.6	1350.0	1335.4	1161.5	669.6	419.5	373.8	356.7	338.9	321.2	322.4
42.5°	1607.7	1515.1	1481.4	1149.5	554.1	373.2	343.4	323.7	306.6	291.3	288.8
45°	1821.0	1703.6	1618.5	1114.6	449.4	344.6	323.7	300.2	278.6	265.3	262.8
47.5°	2038.7	1907.9	1739.7	1044.7	375.7	324.3	310.4	277.4	262.1	253.3	252.0
50°	2246.9	2110.4	1840.0	934.9	333.2	309.7	290.7	266.6	253.9	246.3	245.6
52.5°	2431.6	2302.7	1924.4	821.3	304.7	297.7	281.8	261.5	248.2	241.2	239.9
55°	2607.4	2497.6	2008.2	719.8	279.9	277.4	277.4	256.4	241.8	235.5	234.2
57.5°	2800.3	2719.1	2092.6	645.5	257.7	262.8	271.7	250.7	234.8	229.1	228.5
60°	3023.1	2975.5	2181.5	580.1	238.0	246.9	263.4	243.1	226.6	222.1	220.9
62.5°	3251.0	3252.3	2258.3	501.4	221.5	234.8	253.9	236.1	219.0	215.8	215.2
63°	3291.0	3302.4	2269.1	484.3	217.7	232.3	251.3	233.6	217.1	213.9	213.3
65°	3389.4	3439.5	2278.0	411.9	203.7	222.8	241.8	225.3	208.8	208.2	206.9
67.5°	3365.9	3447.8	2222.8	323.1	187.9	209.5	228.5	213.3	198.7	198.7	196.1
70°	3190.7	3244.0	2053.3	249.4	175.8	195.5	212.6	200.6	185.3	186.6	181.5
72.5°	2922.2	2863.8	1689.0	194.9	161.2	179.6	194.2	184.1	170.7	169.5	163.8
75°	2528.7	2336.4	1209.8	157.4	143.4	158.7	173.9	166.3	154.2	147.3	146.0
77.5°	1927.0	1658.5	724.8	133.3	128.2	140.9	150.4	144.7	135.2	126.9	127.6
80°	1147.6	956.5	326.9	113.0	111.1	120.6	128.2	123.8	117.4	107.3	104.7
82.5°	464.6	370.0	146.6	91.4	93.9	100.9	107.9	104.1	99.0	96.5	81.9
85°	120.6	116.2	85.7	68.5	72.4	75.5	85.1	85.1	80.6	66.0	60.9
87.5°	34.3	45.7	47.6	43.2	48.9	49.5	59.0	59.0	60.3	40.6	36.8
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)