

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: P214600

Luminaire Tested: **ARCH-AF16-60-D-U-T2R-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214600
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-AF16-60-D-U-T2R-7050
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6745 lumens
Efficiency: N/A
Efficacy: 107.1 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

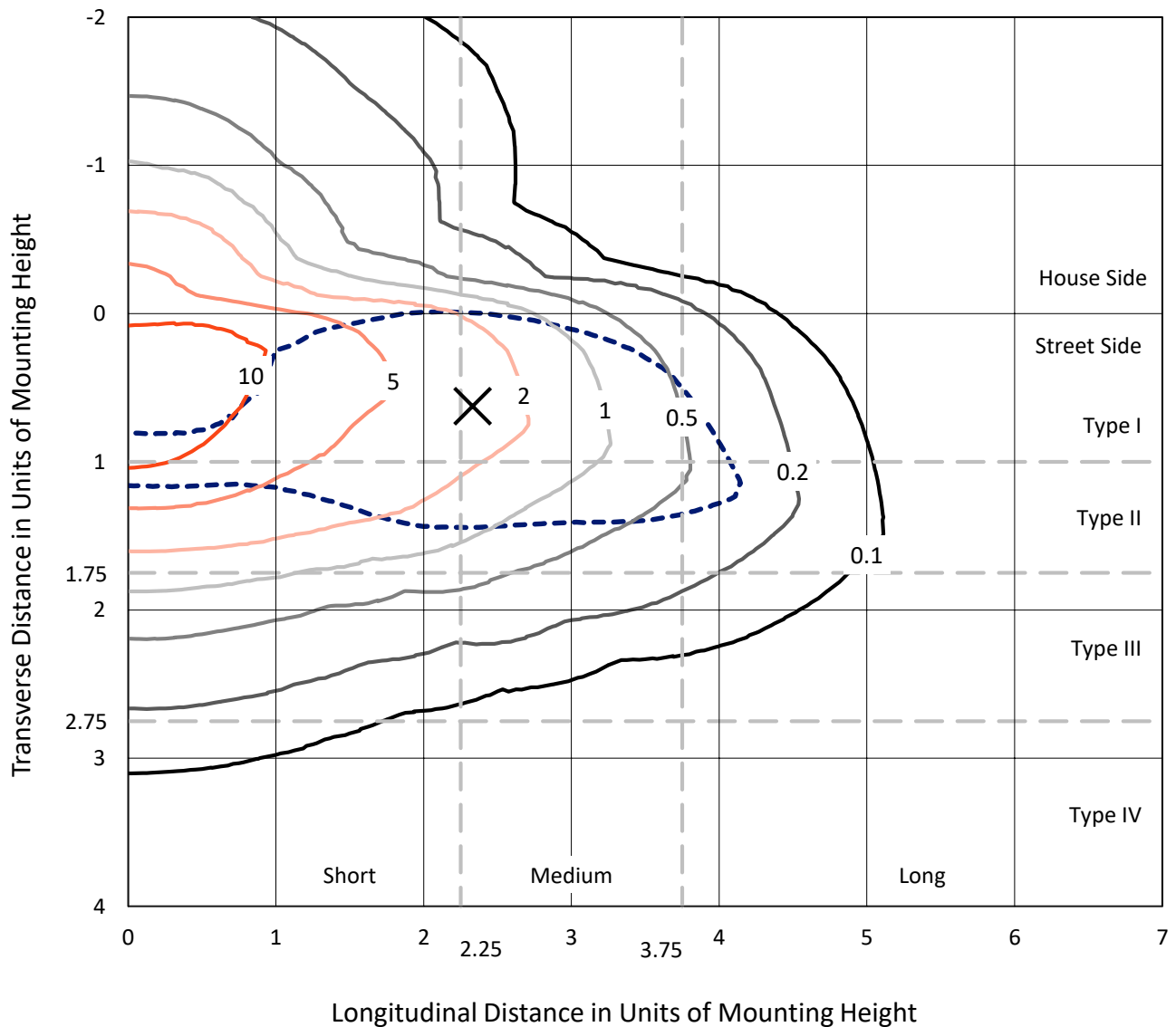
Input Watts (W): 63
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

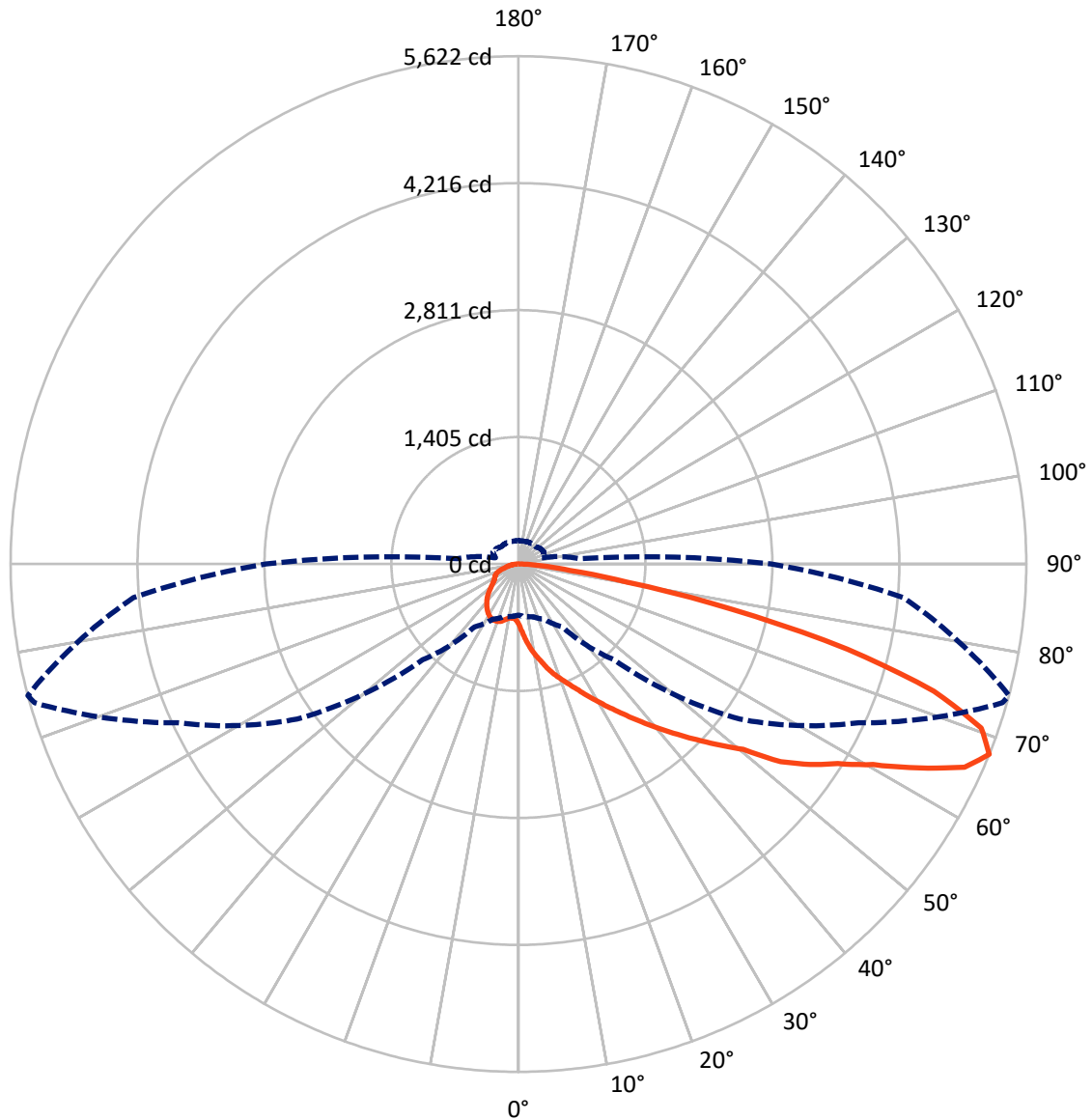
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14 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	1151.8	0.0	1151.8
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	5593.2	0.0	5593.2
	% Fixture	82.9	0.0	82.9
Total	Lumens	6745.0	0.0	6745.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.5	1.2
10°-20°	283.8	4.2
20°-30°	517.5	7.7
30°-40°	849.5	12.6
40°-50°	1228.5	18.2
50°-60°	1447.8	21.5
60°-70°	1406.9	20.9
70°-80°	782.1	11.6
80°-90°	150.4	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°	6745.0	100.0
0°-180°	6745.0	100.0



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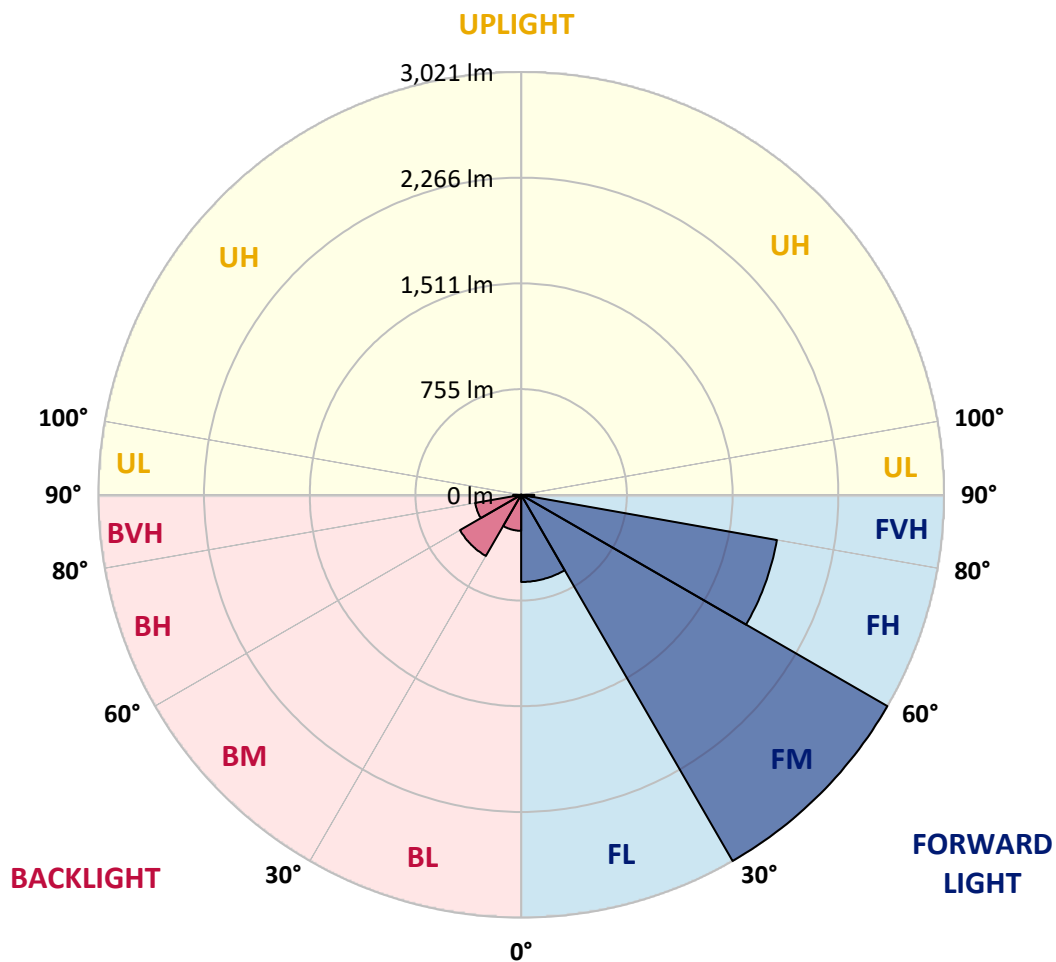
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	622.7	9.2			
FM (30°-60°)	3021.4	44.8			
FH (60°-80°)	1855.5	27.5			G2/5000
FVH (80°-90°)	93.6	1.4			G1/100
BL (0°-30°)	257.1	3.8	B1/500		
BM (30°-60°)	504.4	7.5	B1/1000		
BH (60°-80°)	333.5	4.9	B1/500		G1/500
BVH (80°-90°)	56.8	0.8			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	668.4	668.4	668.4	668.4	668.4	668.4	668.4	668.4	668.4	668.4	668.4
2.5°	947.6	950.4	944.7	932.0	913.7	879.9	850.3	798.1	751.6	745.9	696.6
5°	1113.9	1116.8	1109.7	1094.2	1074.5	1037.8	996.9	929.2	854.5	840.4	736.0
7.5°	1228.2	1229.6	1221.1	1205.6	1190.1	1153.4	1112.5	1036.4	944.7	933.5	786.8
10°	1325.4	1328.3	1317.0	1307.1	1290.2	1253.5	1211.2	1130.9	1036.4	1020.9	839.0
12.5°	1415.7	1418.5	1411.5	1403.0	1397.4	1363.5	1317.0	1221.1	1119.6	1102.7	901.0
15°	1476.3	1479.1	1480.6	1491.8	1498.9	1474.9	1428.4	1324.0	1209.8	1194.3	974.3
17.5°	1459.4	1466.5	1487.6	1528.5	1572.2	1573.6	1535.5	1425.6	1298.7	1281.7	1049.1
20°	1410.0	1415.7	1441.1	1503.1	1589.1	1638.5	1635.7	1528.5	1381.8	1363.5	1118.2
22.5°	1450.9	1458.0	1458.0	1496.1	1580.7	1672.3	1709.0	1630.0	1465.0	1448.1	1187.3
25°	1625.8	1630.0	1600.4	1584.9	1615.9	1700.5	1769.6	1740.0	1566.6	1546.8	1262.0
27.5°	1869.7	1862.7	1826.0	1764.0	1730.1	1752.7	1823.2	1844.3	1683.6	1659.6	1339.5
30°	2112.3	2108.0	2065.7	1982.5	1906.4	1858.4	1882.4	1937.4	1810.5	1782.3	1414.3
32.5°	2339.3	2332.2	2285.7	2188.4	2102.4	2013.6	1967.0	2022.0	1945.9	1913.4	1497.5
35°	2548.0	2529.6	2483.1	2381.6	2292.7	2208.1	2093.9	2102.4	2092.5	2058.7	1589.1
37.5°	2717.2	2703.1	2652.3	2557.8	2463.4	2383.0	2263.1	2194.0	2250.4	2218.0	1694.9
40°	2866.6	2851.1	2798.9	2704.5	2617.1	2540.9	2446.4	2305.4	2428.1	2391.4	1813.3
42.5°	2979.4	2968.2	2925.9	2832.8	2748.2	2679.1	2632.6	2446.4	2612.8	2577.6	1943.0
45°	3040.1	3028.8	3006.2	2931.5	2853.9	2800.4	2804.6	2614.2	2806.0	2776.4	2096.7
47.5°	2965.3	2973.8	2993.5	2979.4	2931.5	2906.1	2958.3	2787.7	3021.7	2993.5	2263.1
50°	2765.1	2773.6	2852.5	2949.8	2966.7	2997.8	3096.5	2987.9	3250.2	3227.6	2469.0
52.5°	2273.0	2319.5	2538.1	2770.7	2930.1	3058.4	3250.2	3285.4	3635.1	3635.1	2832.8
55°	1717.4	1758.3	2007.9	2414.0	2787.7	3064.0	3363.0	3487.1	3912.9	3918.5	3023.1
57.5°	1391.7	1417.1	1539.8	1955.7	2488.7	2993.5	3496.9	3660.5	4144.1	4169.5	3268.5
60°	1129.4	1143.6	1223.9	1513.0	2075.6	2803.2	3592.8	3908.7	4474.1	4509.3	3581.5
62.5°	908.1	922.2	975.8	1149.2	1628.6	2446.4	3575.9	4166.7	4914.0	4971.8	3991.8
65°	724.8	740.3	775.5	882.7	1207.0	2003.7	3402.4	4299.2	5369.5	5425.9	4264.0
67.5°	565.4	579.5	603.5	674.0	850.3	1498.9	2992.1	4159.6	5573.9	5621.9	4278.1
70°	427.2	434.3	454.0	499.2	607.7	995.5	2342.1	3691.5	5390.6	5434.3	3996.1
72.5°	331.4	330.0	341.2	363.8	424.4	685.3	1552.5	3002.0	4766.0	4811.1	3409.5
75°	270.7	269.3	276.4	283.4	307.4	459.7	916.5	2260.3	3846.6	3760.6	2557.8
77.5°	228.4	227.0	234.1	235.5	245.3	317.3	521.7	1487.6	2566.3	2418.2	1441.1
80°	193.2	191.8	200.2	203.0	210.1	232.7	300.3	805.1	1288.8	1221.1	688.1
82.5°	145.2	150.9	166.4	173.4	181.9	172.0	186.1	355.3	597.9	571.1	298.9
85°	70.5	83.2	125.5	139.6	149.5	108.6	126.9	167.8	269.3	256.6	121.3
87.5°	24.0	21.2	74.7	88.8	97.3	49.4	70.5	93.1	111.4	101.5	38.1
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°	668.4	668.4	668.4	668.4	668.4	668.4	668.4	668.4	668.4	668.4	668.4
2.5°	675.4	654.3	623.2	599.3	583.8	571.1	565.4	564.0	561.2	559.8	559.8
5°	689.5	651.4	603.5	578.1	571.1	565.4	568.2	569.7	569.7	569.7	569.7
7.5°	710.7	657.1	599.3	582.4	580.9	580.9	589.4	593.6	596.5	596.5	596.5
10°	738.9	667.0	606.3	592.2	596.5	599.3	609.1	614.8	617.6	619.0	620.4
12.5°	776.9	688.1	620.4	609.1	614.8	616.2	623.2	626.1	628.9	630.3	630.3
15°	827.7	719.1	643.0	628.9	630.3	628.9	628.9	626.1	624.7	624.7	627.5
17.5°	879.9	748.7	662.7	643.0	637.3	626.1	617.6	610.6	606.3	603.5	604.9
20°	932.0	775.5	674.0	645.8	630.3	612.0	596.5	586.6	580.9	575.3	578.1
22.5°	984.2	800.9	678.2	637.3	614.8	588.0	571.1	555.6	542.9	534.4	535.8
25°	1042.0	829.1	678.2	627.5	593.6	565.4	544.3	518.9	500.6	493.5	496.3
27.5°	1099.8	853.1	671.2	609.1	569.7	541.5	510.4	480.8	469.5	465.3	466.7
30°	1157.7	871.4	655.7	586.6	544.3	513.3	472.4	452.6	438.5	427.2	428.7
32.5°	1215.5	884.1	634.5	558.4	517.5	478.0	444.2	421.6	396.2	382.1	383.5
35°	1281.7	894.0	609.1	530.2	487.9	447.0	421.6	384.9	358.2	346.9	344.1
37.5°	1350.8	901.0	582.4	499.2	458.3	424.4	399.0	353.9	328.5	313.0	311.6
40°	1425.6	903.8	549.9	466.7	430.1	410.3	369.4	335.6	291.9	282.0	282.0
42.5°	1514.4	902.4	517.5	434.3	399.0	377.9	348.3	332.8	294.7	284.8	279.2
45°	1615.9	902.4	482.2	396.2	368.0	337.0	324.3	314.4	289.1	293.3	296.1
47.5°	1731.5	899.6	439.9	365.2	342.6	315.9	308.8	287.7	277.8	280.6	283.4
50°	1890.9	903.8	401.9	339.8	324.3	301.8	293.3	282.0	277.8	279.2	277.8
52.5°	2112.3	889.7	365.2	324.3	310.2	280.6	280.6	279.2	280.6	279.2	279.2
55°	2233.5	858.7	338.4	315.9	300.3	270.7	276.4	279.2	282.0	280.6	280.6
57.5°	2405.5	837.6	317.3	310.2	294.7	267.9	273.5	279.2	280.6	279.2	279.2
60°	2608.6	823.5	303.2	311.6	290.5	267.9	275.0	279.2	277.8	276.4	276.4
62.5°	2844.1	817.8	293.3	315.9	286.2	269.3	275.0	279.2	273.5	272.1	272.1
65°	2932.9	767.1	280.6	318.7	289.1	269.3	273.5	275.0	267.9	266.5	265.1
67.5°	2796.1	679.6	262.3	313.0	297.5	269.3	269.3	267.9	259.4	258.0	255.2
70°	2490.1	564.0	234.1	294.7	303.2	270.7	263.7	256.6	248.2	248.2	242.5
72.5°	2038.9	444.2	197.4	262.3	298.9	275.0	252.4	242.5	232.7	232.7	227.0
75°	1469.3	331.4	157.9	218.6	280.6	273.5	238.3	225.6	214.3	212.9	205.9
77.5°	837.6	232.7	128.3	170.6	249.6	266.5	225.6	205.9	193.2	188.9	184.7
80°	430.1	156.5	104.3	134.0	207.3	246.8	215.7	183.3	169.2	162.2	155.1
82.5°	204.5	104.3	80.4	98.7	156.5	215.7	203.0	157.9	142.4	134.0	125.5
85°	91.7	62.0	53.6	63.5	111.4	167.8	179.1	129.7	111.4	139.6	102.9
87.5°	29.6	28.2	28.2	29.6	53.6	73.3	131.1	95.9	88.8	73.3	62.0
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)