

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: P265950

Luminaire Tested: **ARCH-AF24-60-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265950
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-AF24-60-D-U-T2R-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6640.7 lumens
Efficiency: N/A
Efficacy: 103.8 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

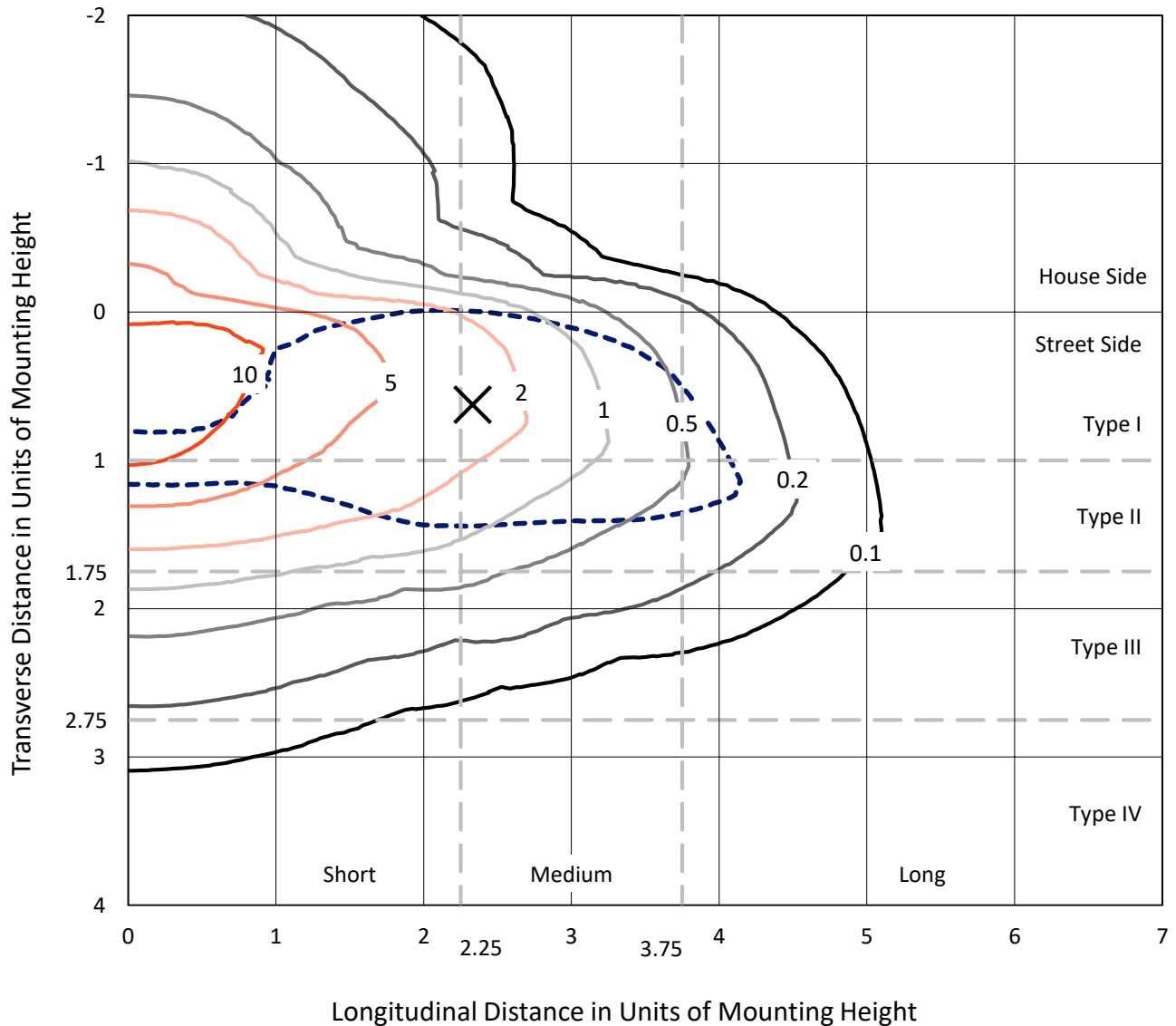
Input Watts (W): 64
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

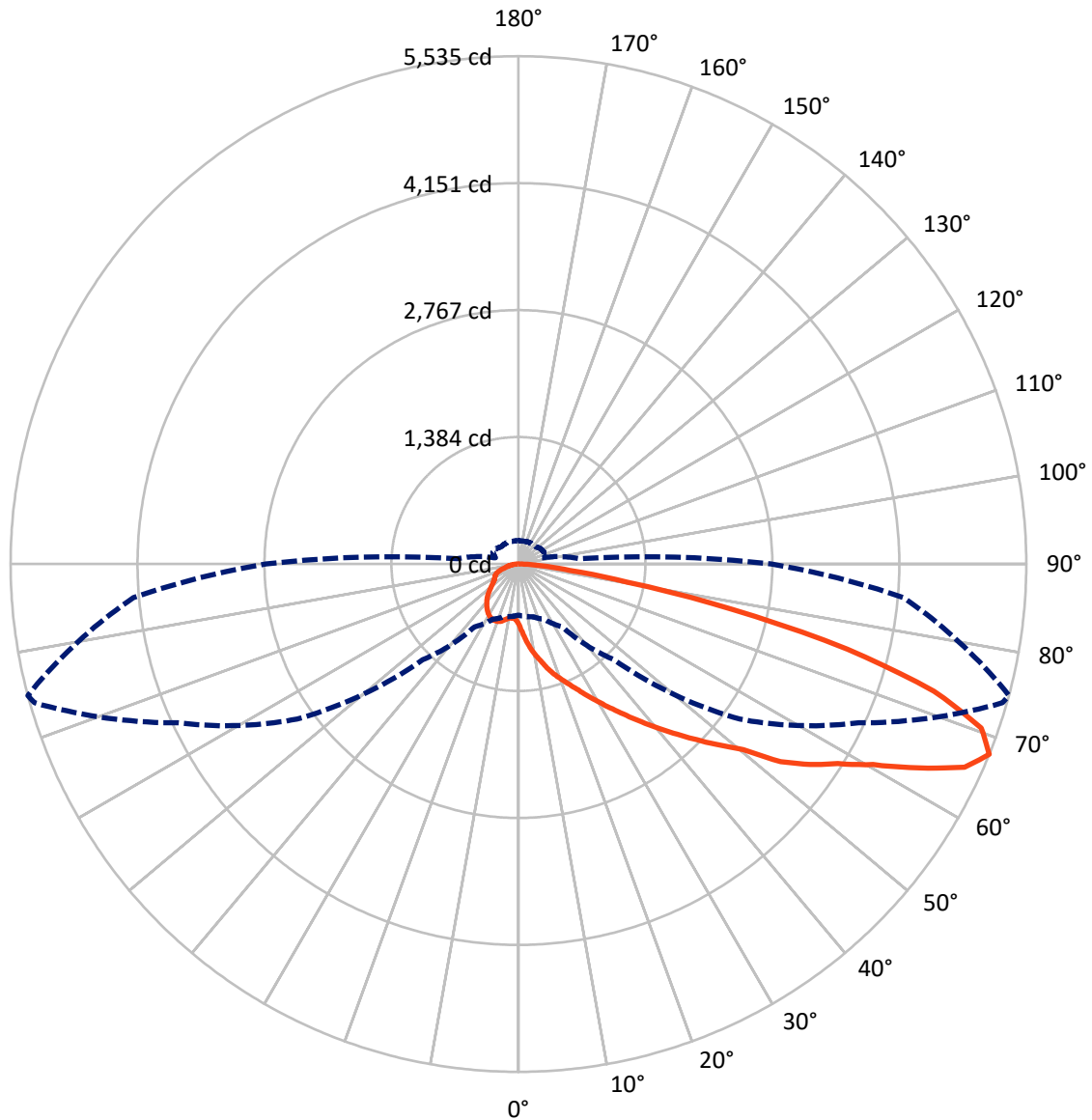
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.8 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	1134.0	0.0	1134.0
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	5506.7	0.0	5506.7
	% Fixture	82.9	0.0	82.9
Total	Lumens	6640.7	0.0	6640.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.3	1.2
10°-20°	279.4	4.2
20°-30°	509.5	7.7
30°-40°	836.4	12.6
40°-50°	1209.5	18.2
50°-60°	1425.4	21.5
60°-70°	1385.2	20.9
70°-80°	770.0	11.6
80°-90°	148.1	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°	6640.7	100.0
0°-180°	6640.7	100.0



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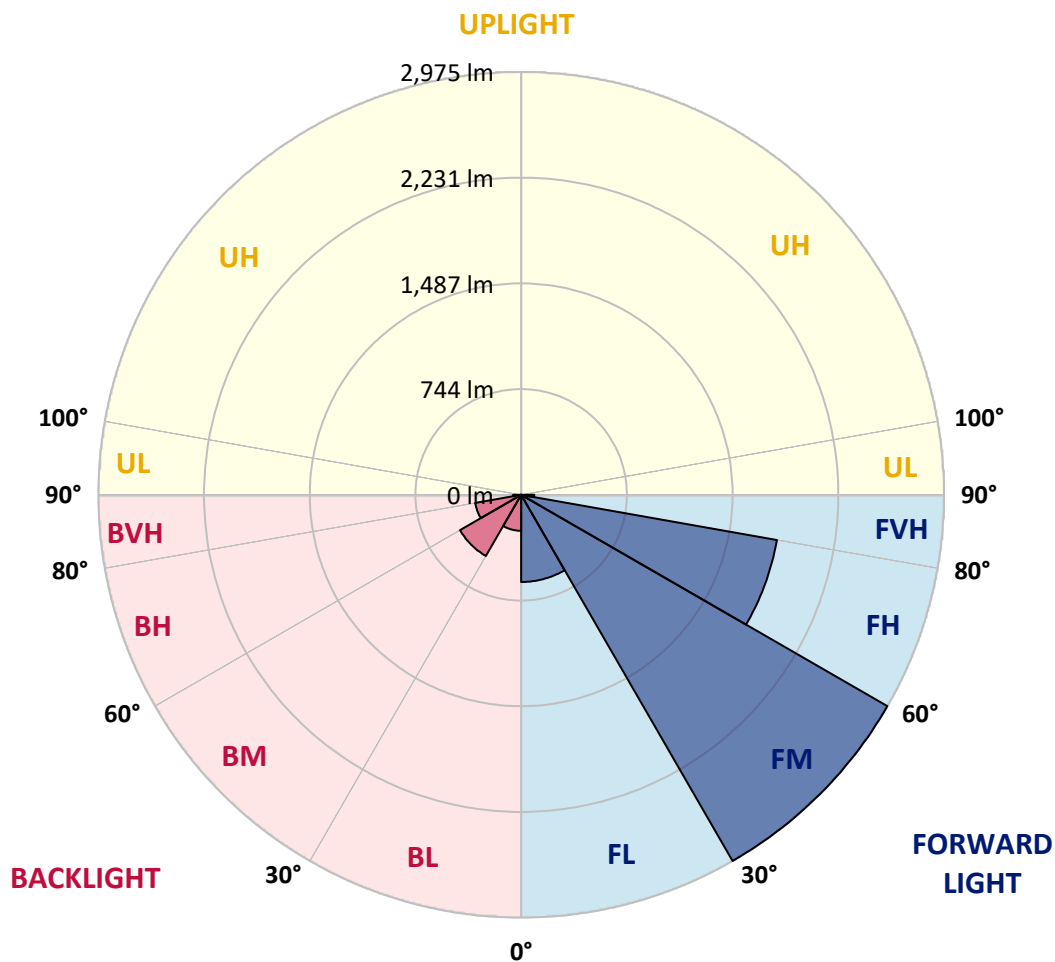
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	613.1	9.2			
FM (30°-60°)	2974.7	44.8			
FH (60°-80°)	1826.8	27.5			G2/5000
FVH (80°-90°)	92.1	1.4			G1/100
BL (0°-30°)	253.1	3.8	B1/500		
BM (30°-60°)	496.6	7.5	B1/1000		
BH (60°-80°)	328.3	4.9	B1/500		G1/500
BVH (80°-90°)	55.9	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°	658.0	658.0	658.0	658.0	658.0	658.0	658.0	658.0	658.0	658.0	658.0
2.5°	932.9	935.7	930.1	917.6	899.7	866.2	837.1	785.7	739.9	734.4	685.8
5°	1096.7	1099.4	1092.6	1077.2	1057.8	1021.7	981.5	914.8	841.4	827.3	724.7
7.5°	1209.2	1210.6	1202.2	1186.9	1171.7	1135.5	1095.4	1020.4	930.1	919.1	774.7
10°	1305.0	1307.8	1296.7	1286.9	1270.3	1234.1	1192.5	1113.4	1020.4	1005.2	826.0
12.5°	1393.8	1396.5	1389.7	1381.4	1375.8	1342.4	1296.7	1202.2	1102.3	1085.6	887.0
15°	1453.5	1456.2	1457.7	1468.8	1475.6	1452.1	1406.2	1303.6	1191.2	1175.8	959.3
17.5°	1436.7	1443.8	1464.5	1504.9	1547.9	1549.2	1511.8	1403.5	1278.6	1261.8	1032.8
20°	1388.2	1393.8	1418.9	1479.9	1564.6	1613.1	1610.3	1504.9	1360.6	1342.4	1101.0
22.5°	1428.6	1435.4	1435.4	1473.0	1556.3	1646.5	1682.5	1604.8	1442.4	1425.7	1169.0
25°	1600.6	1604.8	1575.6	1560.4	1590.9	1674.3	1742.3	1713.1	1542.3	1522.8	1242.4
27.5°	1840.7	1833.9	1797.8	1736.8	1703.4	1725.6	1795.1	1815.8	1657.6	1633.9	1318.8
30°	2079.5	2075.4	2033.9	1951.8	1876.9	1829.7	1853.4	1907.5	1782.4	1754.7	1392.5
32.5°	2303.2	2296.2	2250.3	2154.6	2069.9	1982.4	1936.6	1990.7	1915.7	1883.8	1474.3
35°	2508.5	2490.6	2444.6	2344.8	2257.4	2174.0	2061.5	2069.9	2060.2	2026.8	1564.6
37.5°	2675.2	2661.3	2611.4	2518.3	2425.2	2346.2	2228.2	2160.2	2215.6	2183.7	1668.7
40°	2822.4	2807.1	2755.7	2662.7	2576.6	2501.6	2408.6	2269.7	2390.6	2354.5	1785.3
42.5°	2933.3	2922.2	2880.7	2789.0	2705.7	2637.7	2591.9	2408.6	2572.4	2537.7	1913.0
45°	2993.1	2982.0	2959.7	2886.2	2809.8	2757.1	2761.2	2573.9	2762.6	2733.5	2064.3
47.5°	2919.5	2927.8	2947.2	2933.3	2886.2	2861.2	2912.6	2744.5	2974.9	2947.2	2228.2
50°	2722.4	2730.7	2808.5	2904.2	2920.8	2951.4	3048.6	2941.7	3199.9	3177.8	2430.9
52.5°	2237.9	2283.8	2498.8	2728.0	2884.7	3011.1	3199.9	3234.5	3578.8	3578.8	2789.0
55°	1690.9	1731.2	1976.9	2376.6	2744.5	3016.7	3311.0	3433.1	3852.4	3858.0	2976.4
57.5°	1370.3	1395.2	1516.0	1925.4	2450.2	2947.2	3442.8	3603.9	4080.0	4105.1	3218.0
60°	1112.0	1125.8	1204.9	1489.6	2043.6	2759.9	3537.3	3848.2	4404.8	4439.7	3526.1
62.5°	894.1	907.8	960.6	1131.4	1603.5	2408.6	3520.5	4102.3	4838.0	4895.0	3930.2
65°	713.6	728.9	763.5	869.0	1188.4	1972.7	3349.8	4232.8	5286.4	5342.0	4198.0
67.5°	556.7	570.6	594.1	663.6	837.1	1475.6	2945.8	4095.4	5487.7	5534.9	4212.0
70°	420.6	427.6	446.9	491.5	598.4	980.1	2305.9	3634.5	5307.2	5350.2	3934.2
72.5°	326.3	324.8	336.0	358.2	417.8	674.6	1528.5	2955.6	4692.2	4736.8	3356.7
75°	266.5	265.2	272.0	279.1	302.5	452.6	902.3	2225.3	3787.2	3702.5	2518.3
77.5°	224.8	223.5	230.4	231.9	241.6	312.3	513.7	1464.5	2526.7	2380.9	1418.9
80°	190.3	188.9	197.2	200.0	206.9	229.1	295.7	792.7	1268.9	1202.2	677.4
82.5°	143.0	148.5	163.9	170.8	179.1	169.4	183.3	349.8	588.6	562.2	294.4
85°	69.3	81.9	123.5	137.4	147.1	106.9	125.0	165.2	265.2	252.7	119.4
87.5°	23.5	20.8	73.7	87.5	95.8	48.6	69.3	91.6	109.7	99.9	37.5
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°	658.0	658.0	658.0	658.0	658.0	658.0	658.0	658.0	658.0	658.0	658.0
2.5°	664.9	644.2	613.6	589.9	574.7	562.2	556.7	555.3	552.5	551.1	551.1
5°	678.8	641.4	594.1	569.2	562.2	556.7	559.5	560.8	560.8	560.8	560.8
7.5°	699.7	646.9	589.9	573.4	572.0	572.0	580.2	584.4	587.2	587.2	587.2
10°	727.4	656.7	597.0	583.1	587.2	589.9	599.7	605.3	608.1	609.4	610.8
12.5°	764.9	677.4	610.8	599.7	605.3	606.6	613.6	616.3	619.1	620.5	620.5
15°	814.9	708.0	633.0	619.1	620.5	619.1	619.1	616.3	615.0	615.0	617.8
17.5°	866.2	737.1	652.4	633.0	627.5	616.3	608.1	601.1	597.0	594.1	595.5
20°	917.6	763.5	663.6	635.8	620.5	602.6	587.2	577.5	572.0	566.4	569.2
22.5°	969.0	788.5	667.7	627.5	605.3	578.9	562.2	547.0	534.5	526.1	527.6
25°	1026.0	816.3	667.7	617.8	584.4	556.7	535.8	510.9	492.8	486.0	488.7
27.5°	1082.8	839.8	660.9	599.7	560.8	533.1	502.5	473.3	462.3	458.1	459.6
30°	1139.8	857.9	645.5	577.5	535.8	505.3	465.1	445.6	431.7	420.6	422.1
32.5°	1196.6	870.5	624.7	549.8	509.5	470.6	437.2	415.0	390.1	376.2	377.6
35°	1261.8	880.2	599.7	521.9	480.4	440.1	415.0	378.9	352.7	341.5	338.8
37.5°	1329.9	887.0	573.4	491.5	451.2	417.8	392.9	348.5	323.5	308.2	306.9
40°	1403.5	890.0	541.4	459.6	423.5	404.0	363.8	330.3	287.4	277.7	277.7
42.5°	1490.9	888.5	509.5	427.6	392.9	372.1	343.0	327.6	290.2	280.5	274.9
45°	1590.9	888.5	474.8	390.1	362.3	331.8	319.3	309.6	284.7	288.7	291.5
47.5°	1704.8	885.6	433.2	359.5	337.4	311.0	304.0	283.1	273.4	276.3	279.1
50°	1861.6	890.0	395.7	334.6	319.3	297.1	288.7	277.7	273.4	274.9	273.4
52.5°	2079.5	875.9	359.5	319.3	305.5	276.3	276.3	274.9	276.3	274.9	274.9
55°	2199.1	845.5	333.2	311.0	295.7	266.5	272.0	274.9	277.7	276.3	276.3
57.5°	2368.3	824.6	312.3	305.5	290.2	263.7	269.3	274.9	276.3	274.9	274.9
60°	2568.3	810.7	298.4	306.9	286.0	263.7	270.7	274.9	273.4	272.0	272.0
62.5°	2800.0	805.2	288.7	311.0	281.8	265.2	270.7	274.9	269.3	268.0	268.0
65°	2887.5	755.2	276.3	313.8	284.7	265.2	269.3	270.7	263.7	262.3	261.0
67.5°	2752.9	669.1	258.3	308.2	292.8	265.2	265.2	263.7	255.5	254.0	251.3
70°	2451.7	555.3	230.4	290.2	298.4	266.5	259.6	252.7	244.2	244.2	238.8
72.5°	2007.4	437.2	194.4	258.3	294.4	270.7	248.6	238.8	229.1	229.1	223.5
75°	1446.5	326.3	155.4	215.1	276.3	269.3	234.5	222.2	211.0	209.7	202.7
77.5°	824.6	229.1	126.3	168.0	245.7	262.3	222.2	202.7	190.3	185.9	181.8
80°	423.5	154.1	102.8	132.0	204.1	242.9	212.4	180.5	166.5	159.7	152.7
82.5°	201.3	102.8	79.1	97.1	154.1	212.4	200.0	155.4	140.2	132.0	123.5
85°	90.2	61.1	52.7	62.4	109.7	165.2	176.2	127.6	109.7	137.4	101.4
87.5°	29.1	27.8	27.8	29.1	52.7	72.3	129.0	94.4	87.5	72.3	61.1
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)