

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: P398023

Luminaire Tested: **ARCH-S-PA1-70-830-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398023
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-PA1-70-830-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8047 lumens
Efficiency: N/A
Efficacy: 108.7 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

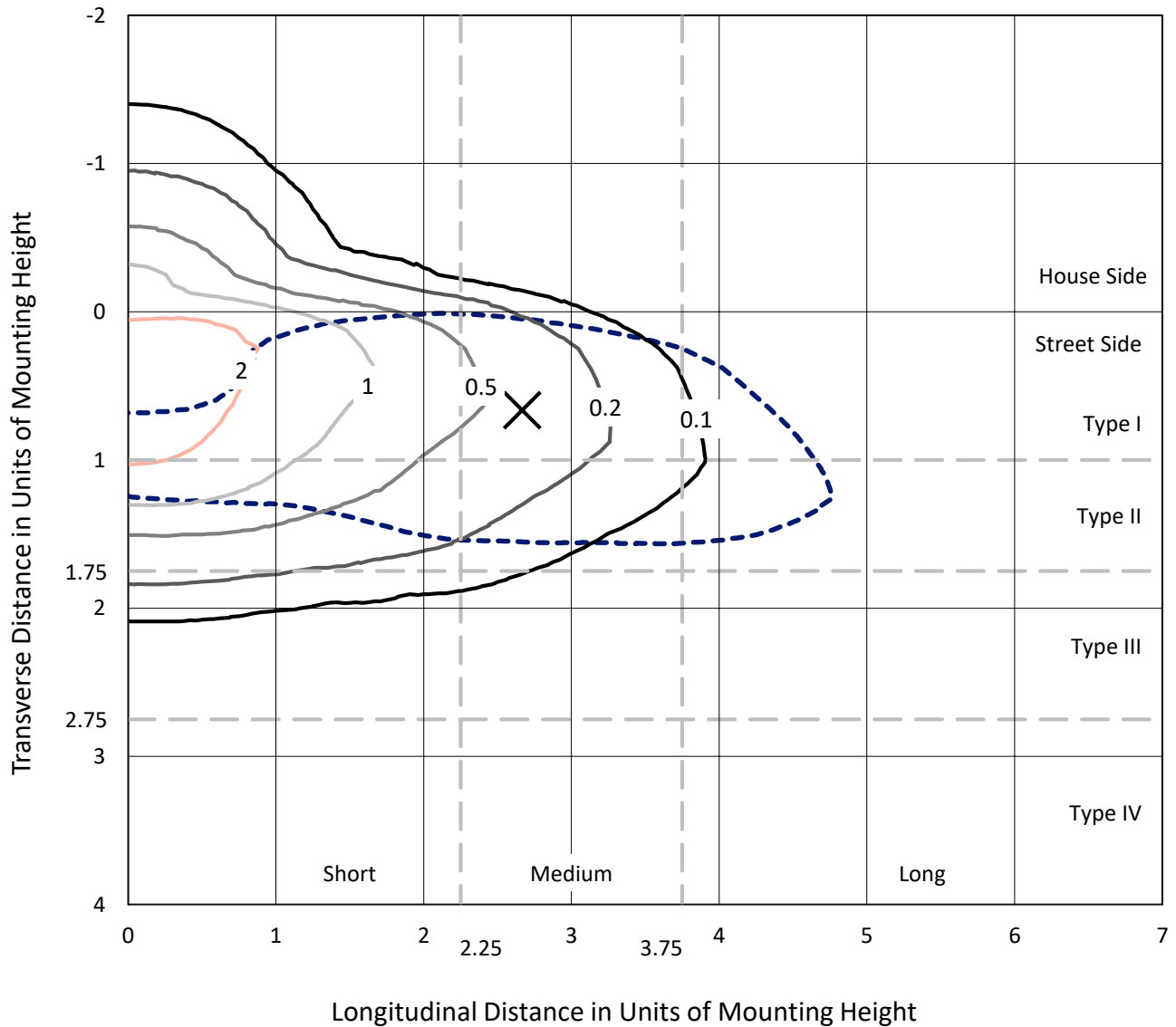
Input Watts (W): 74
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

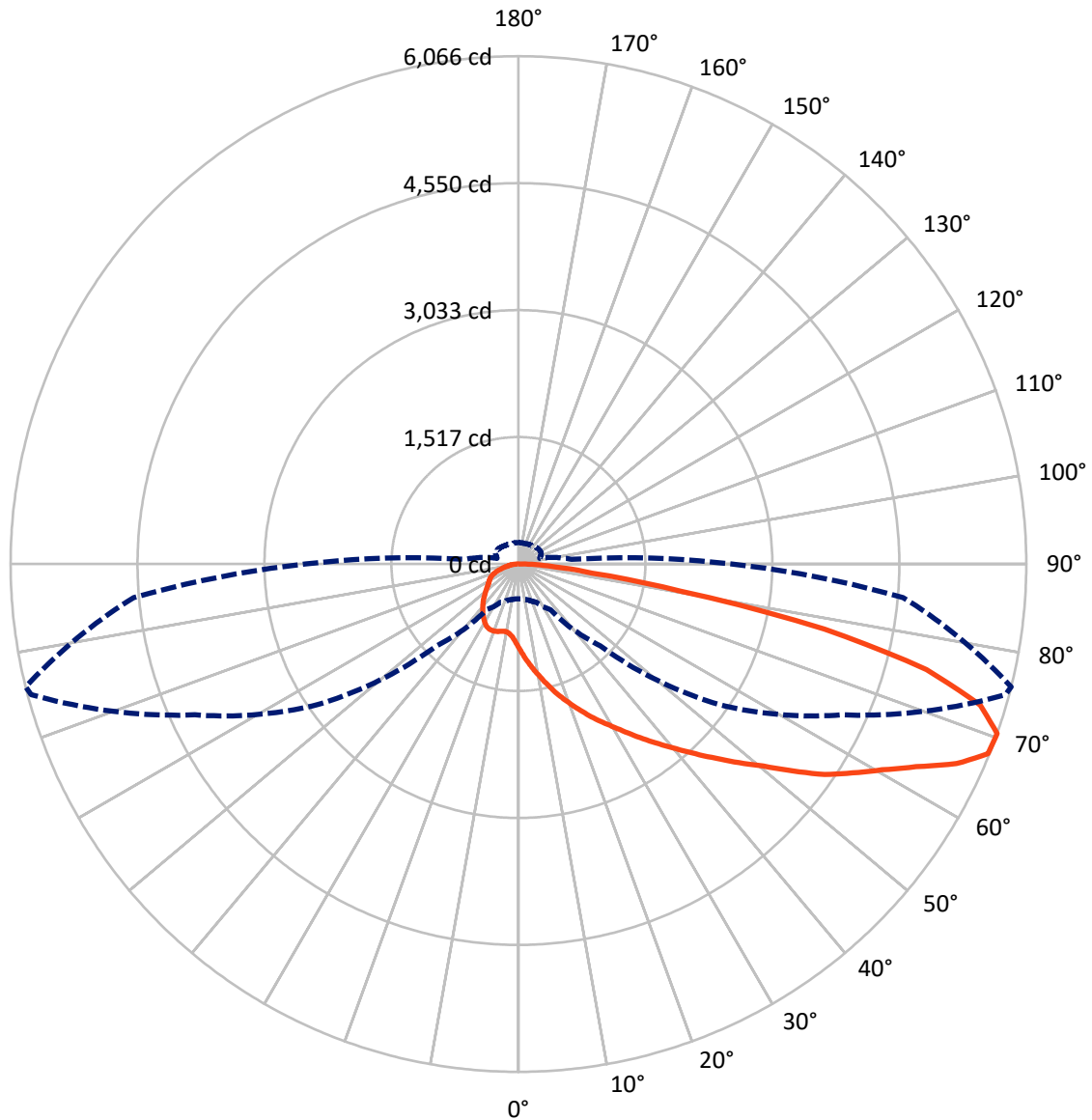


Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type II - Medium - Non-Cutoff

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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	1313.8	0.0	1313.8
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	6733.2	0.0	6733.2
	% Fixture	83.7	0.0	83.7
Total	Lumens	8047.0	0.0	8047.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.6	1.3
10°-20°	355.4	4.4
20°-30°	635.8	7.9
30°-40°	1028.5	12.8
40°-50°	1487.9	18.5
50°-60°	1703.0	21.2
60°-70°	1566.5	19.5
70°-80°	968.7	12.0
80°-90°	196.7	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°	8047.0	100.0
0°-180°	8047.0	100.0

Coefficient of Utilization



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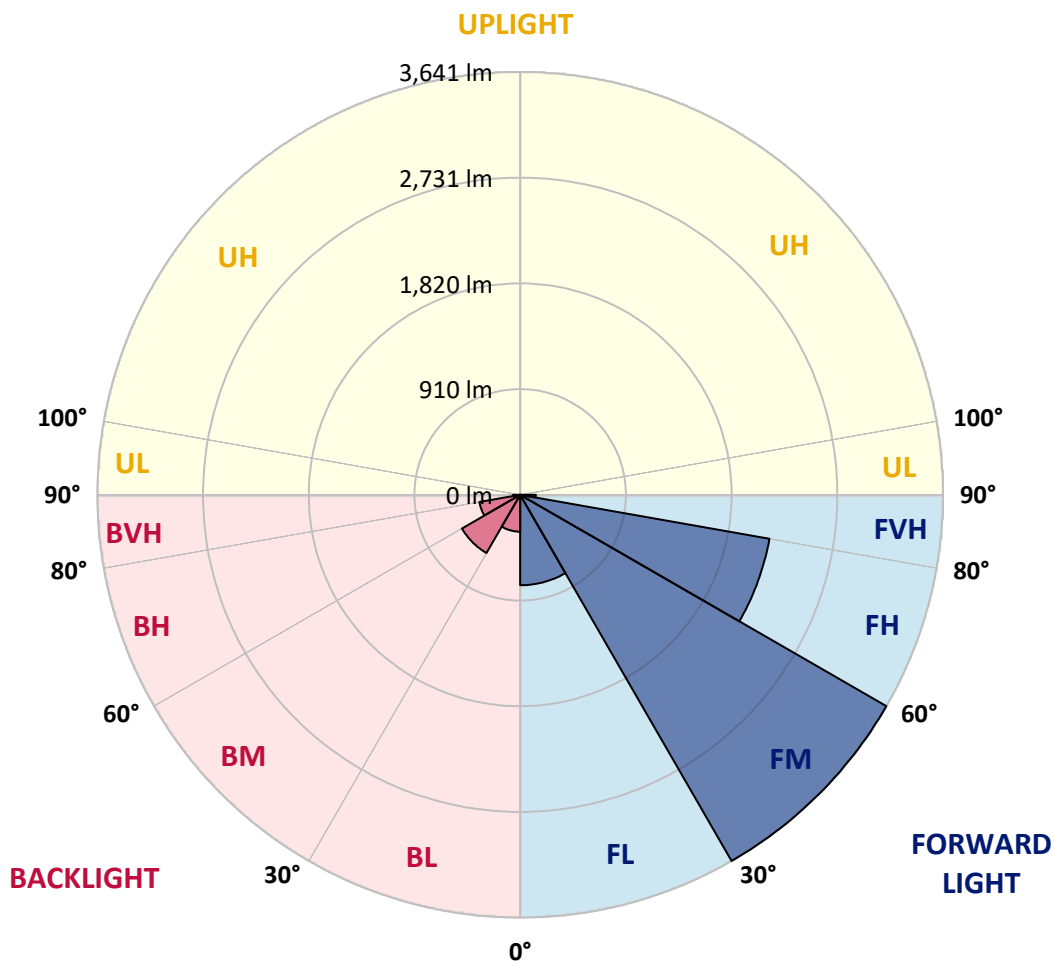
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	778.4	9.7			
FM	(30°-60°)	3640.9	45.2			
FH	(60°-80°)	2178.9	27.1			G2/5000
FVH	(80°-90°)	135.0	1.7			G2/225
BL	(0°-30°)	317.3	3.9	B1/500		
BM	(30°-60°)	578.4	7.2	B1/1000		
BH	(60°-80°)	356.3	4.4	B1/500		G1/500
BVH	(80°-90°)	61.7	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°	1006.3	1006.3	1006.3	1006.3	1006.3	1006.3	1006.3	1006.3	1006.3	1006.3	1006.3
2.5°	1282.5	1273.0	1271.9	1257.1	1243.3	1206.3	1179.9	1133.3	1086.7	1085.7	1039.1
5°	1482.5	1473.0	1467.7	1449.7	1426.4	1377.7	1330.1	1258.2	1178.8	1173.5	1085.7
7.5°	1617.9	1609.5	1598.9	1591.5	1569.3	1525.9	1467.7	1382.0	1273.0	1262.4	1139.6
10°	1708.9	1703.6	1701.5	1696.2	1682.5	1647.6	1591.5	1500.5	1367.1	1355.5	1196.8
12.5°	1748.1	1746.0	1755.5	1770.3	1775.6	1761.8	1707.9	1622.2	1470.8	1458.1	1265.6
15°	1702.6	1704.7	1729.0	1779.8	1833.8	1863.4	1831.7	1748.1	1588.3	1570.3	1346.0
17.5°	1681.4	1684.6	1701.5	1750.2	1826.4	1918.4	1933.3	1867.7	1701.5	1676.1	1430.6
20°	1718.5	1722.7	1735.4	1773.5	1826.4	1924.8	2002.0	1981.9	1812.6	1786.2	1512.1
22.5°	1812.6	1817.9	1816.9	1841.2	1877.2	1944.9	2040.1	2089.9	1929.0	1899.4	1596.8
25°	2013.7	2009.4	1973.5	1961.8	1971.4	2014.7	2090.9	2193.6	2050.7	2021.1	1685.7
27.5°	2286.7	2281.4	2215.8	2156.5	2103.6	2122.7	2162.9	2277.2	2174.5	2140.7	1770.3
30°	2578.7	2572.4	2496.2	2399.9	2282.5	2254.9	2249.7	2350.2	2299.4	2263.4	1860.2
32.5°	2863.4	2858.1	2776.6	2664.5	2502.6	2420.0	2369.2	2431.7	2441.2	2406.3	1958.7
35°	3122.6	3122.6	3052.8	2919.5	2736.4	2611.5	2527.9	2532.2	2604.1	2563.9	2070.8
37.5°	3353.3	3352.3	3276.1	3144.9	2969.2	2826.3	2722.7	2653.9	2759.7	2724.8	2188.3
40°	3536.4	3529.0	3472.9	3358.6	3181.9	3040.1	2935.3	2796.7	2933.2	2901.5	2313.1
42.5°	3669.7	3665.5	3627.4	3527.9	3359.7	3226.3	3154.4	2976.6	3130.0	3098.3	2459.2
45°	3721.6	3730.0	3730.0	3635.8	3502.5	3380.8	3349.1	3174.5	3342.7	3311.0	2615.8
47.5°	3638.0	3660.2	3705.7	3712.0	3594.6	3512.0	3522.6	3373.4	3561.8	3544.8	2787.2
50°	3376.6	3417.9	3517.3	3697.2	3631.6	3612.6	3670.8	3576.6	3796.7	3791.4	2995.7
52.5°	2702.5	2803.1	3113.1	3435.9	3606.2	3659.1	3817.8	3805.1	4099.3	4107.8	3267.6
55°	2072.9	2111.0	2469.7	3018.9	3450.7	3644.3	3916.3	4028.4	4427.3	4437.9	3517.3
57.5°	1676.1	1701.5	1897.3	2469.7	3096.2	3563.9	3993.5	4158.6	4679.2	4706.7	3739.5
60°	1328.0	1365.0	1496.2	1889.9	2599.9	3370.2	4047.5	4303.5	4950.1	4991.3	4005.1
62.5°	987.3	1005.3	1129.1	1399.9	2058.1	3022.1	4018.9	4461.2	5282.3	5332.1	4324.7
65°	702.6	718.5	806.3	995.7	1521.6	2551.2	3852.8	4578.7	5699.3	5750.1	4646.4
67.5°	525.9	532.3	582.0	696.3	1025.4	1981.9	3516.3	4558.6	6004.0	6049.5	4775.5
70°	415.9	418.0	442.3	503.7	666.6	1379.8	2926.9	4263.3	6026.2	6066.4	4612.5
72.5°	345.0	343.9	357.7	387.3	464.5	873.0	2168.2	3715.2	5740.5	5768.0	4157.5
75°	284.6	286.8	296.3	313.2	354.5	575.6	1405.2	2963.9	5064.4	5034.7	3488.8
77.5°	239.1	238.1	242.3	257.1	286.8	413.7	823.2	2141.7	3753.3	3738.5	2289.9
80°	192.6	194.7	201.1	213.7	241.3	315.3	486.8	1336.5	2013.7	1959.7	1094.1
82.5°	129.1	149.2	161.9	176.7	208.5	232.8	309.0	679.3	900.5	886.7	496.3
85°	61.4	81.5	120.6	137.6	169.3	146.0	209.5	323.8	450.8	445.5	178.8
87.5°	12.7	12.7	64.5	77.2	104.8	62.4	116.4	140.7	218.0	204.2	73.0
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°	1006.3	1006.3	1006.3	1006.3	1006.3	1006.3	1006.3	1006.3	1006.3	1006.3	1006.3
2.5°	1011.6	983.0	925.9	880.4	833.8	807.4	774.6	758.7	755.5	747.1	753.4
5°	1029.6	973.5	865.6	794.7	747.1	723.8	712.1	707.9	706.9	704.7	704.7
7.5°	1053.9	968.2	827.5	755.5	724.8	717.4	720.6	727.0	728.0	730.1	729.1
10°	1083.6	969.3	806.3	746.0	731.2	732.2	742.8	751.3	755.5	758.7	757.6
12.5°	1124.8	982.0	803.1	752.4	746.0	750.2	760.8	769.3	773.5	774.6	774.6
15°	1178.8	1008.4	810.6	766.1	760.8	764.0	770.3	773.5	774.6	773.5	773.5
17.5°	1238.0	1040.2	821.1	774.6	766.1	762.9	760.8	757.6	751.3	747.1	747.1
20°	1295.2	1068.7	826.4	773.5	758.7	746.0	733.3	717.4	706.9	698.4	698.4
22.5°	1352.3	1095.2	826.4	761.9	738.6	714.3	687.8	662.4	646.5	636.0	636.0
25°	1412.6	1120.6	820.1	741.8	706.9	671.9	636.0	604.2	588.3	577.8	575.6
27.5°	1463.4	1135.4	803.1	713.2	667.7	623.3	582.0	549.2	537.5	528.0	528.0
30°	1517.4	1144.9	771.4	676.2	623.3	572.5	530.1	503.7	491.0	477.2	476.2
32.5°	1577.7	1151.3	735.4	637.0	577.8	523.8	487.8	466.6	439.1	424.3	422.2
35°	1647.6	1159.7	697.3	592.6	532.3	483.6	462.4	427.5	401.0	388.3	387.3
37.5°	1721.6	1166.1	656.1	553.4	491.0	457.1	436.0	394.7	371.4	352.4	350.3
40°	1799.9	1166.1	613.7	515.3	458.2	445.5	405.3	368.2	329.1	319.6	317.4
42.5°	1886.7	1164.0	571.4	478.3	427.5	419.0	387.3	348.1	328.0	319.6	317.4
45°	1978.8	1156.6	531.2	436.0	395.8	378.8	354.5	343.9	335.4	335.4	335.4
47.5°	2083.5	1150.2	485.7	397.9	372.5	353.4	335.4	329.1	328.0	331.2	334.4
50°	2217.9	1148.1	447.6	370.4	354.5	332.3	330.1	324.9	325.9	325.9	325.9
52.5°	2380.9	1129.1	411.6	350.3	336.5	310.0	316.4	321.7	323.8	322.7	321.7
55°	2500.4	1095.2	380.9	336.5	323.8	301.6	310.0	318.5	320.6	317.4	317.4
57.5°	2608.4	1047.6	356.6	325.9	315.3	296.3	305.8	314.3	312.2	311.1	310.0
60°	2732.2	1002.1	337.6	320.6	306.9	294.2	302.6	307.9	304.8	302.6	301.6
62.5°	2866.6	957.6	323.8	320.6	300.5	293.1	299.5	301.6	295.2	293.1	293.1
65°	2929.0	887.8	309.0	320.6	297.3	291.0	293.1	291.0	284.6	284.6	283.6
67.5°	2826.3	772.5	289.9	316.4	301.6	287.8	283.6	280.4	273.0	273.0	270.9
70°	2542.8	634.9	262.4	302.6	302.6	286.8	270.9	263.5	255.0	258.2	254.0
72.5°	2172.4	503.7	228.6	279.4	296.3	285.7	257.1	245.5	238.1	241.3	234.9
75°	1759.7	390.5	188.4	242.3	280.4	280.4	243.4	227.5	219.0	219.0	211.6
77.5°	1121.7	288.9	153.4	201.1	251.8	273.0	231.7	207.4	194.7	191.5	186.2
80°	555.5	203.2	125.9	159.8	214.8	256.1	223.3	184.1	166.1	159.8	150.3
82.5°	295.2	140.7	100.5	124.9	171.4	230.7	212.7	158.7	136.5	127.0	116.4
85°	132.3	86.8	80.4	95.2	130.2	189.4	191.5	130.2	104.8	124.9	92.1
87.5°	48.7	39.2	39.2	48.7	75.1	79.4	135.4	83.6	66.7	45.5	36.0
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)