

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: P397978

Luminaire Tested: **ARCH-S-PA1-70-730-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397978
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-PA1-70-730-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 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: 9223 lumens
Efficiency: N/A
Efficacy: 124.6 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

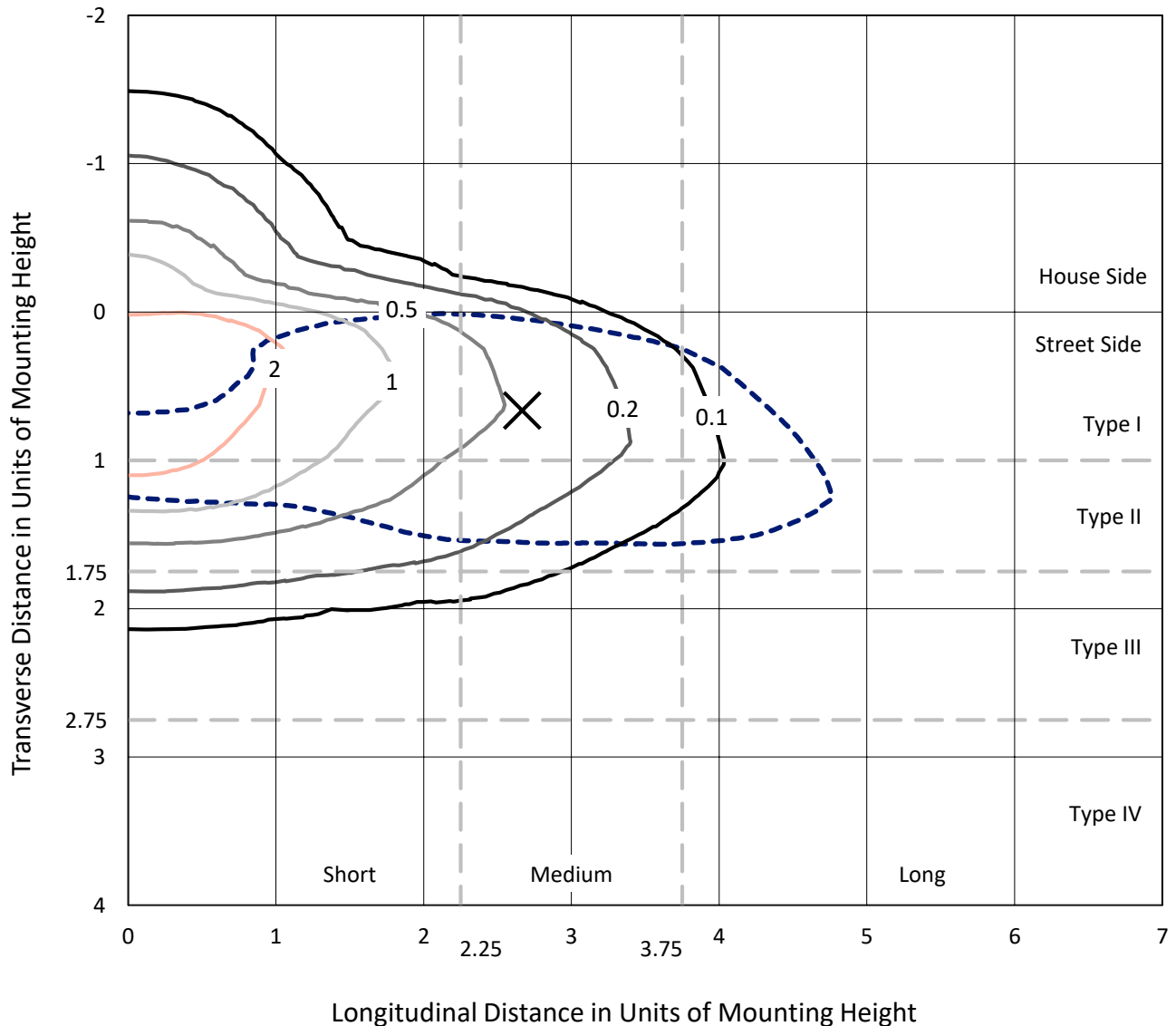
Input Watts (W): 74
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

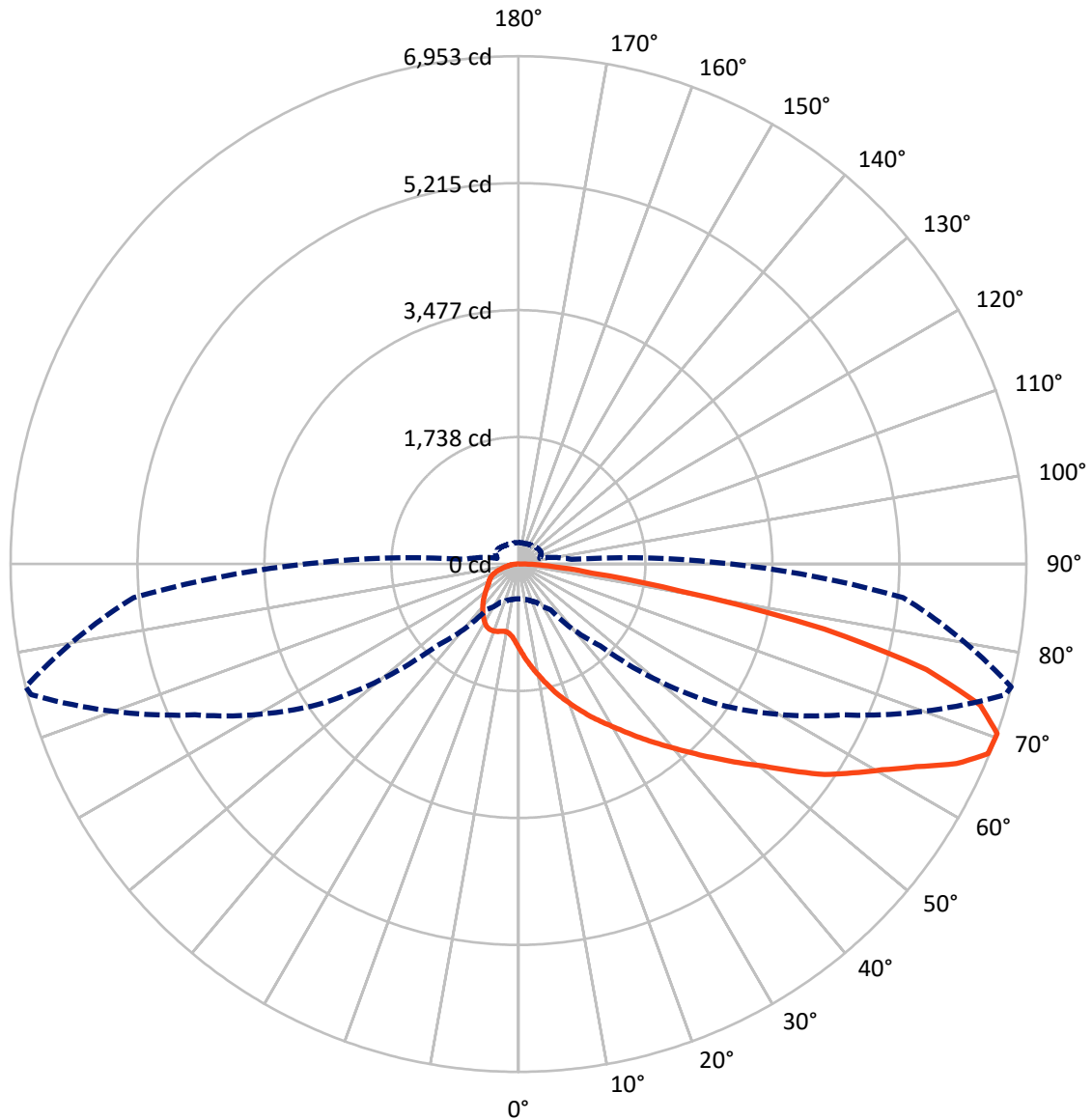


Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
 Type II - Medium - Non-Cutoff

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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	1505.8	0.0	1505.8
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	7717.3	0.0	7717.3
	% Fixture	83.7	0.0	83.7
Total	Lumens	9223.0	0.0	9223.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.8	1.3
10°-20°	407.3	4.4
20°-30°	728.7	7.9
30°-40°	1178.8	12.8
40°-50°	1705.3	18.5
50°-60°	1951.8	21.2
60°-70°	1795.5	19.5
70°-80°	1110.3	12.0
80°-90°	225.5	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°	9223.0	100.0
0°-180°	9223.0	100.0



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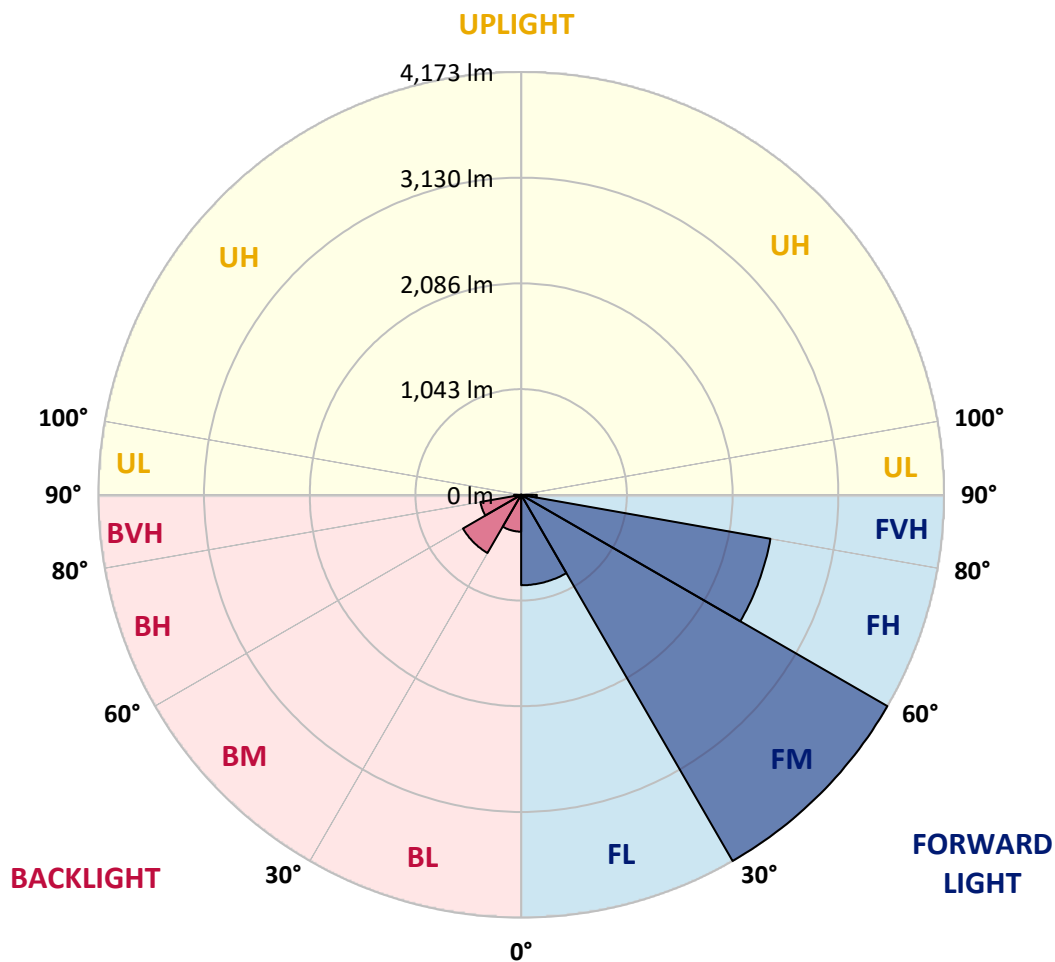
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	892.2	9.7			
FM	(30°-60°)	4173.0	45.2			
FH	(60°-80°)	2497.3	27.1			G2/5000
FVH	(80°-90°)	154.8	1.7			G2/225
BL	(0°-30°)	363.7	3.9	B1/500		
BM	(30°-60°)	663.0	7.2	B1/1000		
BH	(60°-80°)	408.4	4.4	B1/500		G1/500
BVH	(80°-90°)	70.7	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°	1153.4	1153.4	1153.4	1153.4	1153.4	1153.4	1153.4	1153.4	1153.4	1153.4	1153.4
2.5°	1469.9	1459.0	1457.8	1440.8	1425.0	1382.6	1352.3	1298.9	1245.5	1244.3	1191.0
5°	1699.1	1688.2	1682.2	1661.5	1634.9	1579.1	1524.5	1442.0	1351.1	1345.0	1244.3
7.5°	1854.4	1844.7	1832.5	1824.1	1798.6	1748.9	1682.2	1583.9	1459.0	1446.9	1306.2
10°	1958.7	1952.6	1950.2	1944.1	1928.4	1888.3	1824.1	1719.8	1566.9	1553.6	1371.7
12.5°	2003.6	2001.1	2012.0	2029.0	2035.1	2019.3	1957.5	1859.2	1685.8	1671.2	1450.5
15°	1951.4	1953.8	1981.7	2039.9	2101.8	2135.7	2099.4	2003.6	1820.4	1799.8	1542.7
17.5°	1927.1	1930.8	1950.2	2006.0	2093.3	2198.8	2215.8	2140.6	1950.2	1921.1	1639.7
20°	1969.6	1974.4	1989.0	2032.7	2093.3	2206.1	2294.6	2271.6	2077.5	2047.2	1733.1
22.5°	2077.5	2083.6	2082.4	2110.3	2151.5	2229.1	2338.3	2395.3	2210.9	2177.0	1830.1
25°	2308.0	2303.1	2261.9	2248.5	2259.5	2309.2	2396.5	2514.1	2350.4	2316.5	1932.0
27.5°	2620.9	2614.8	2539.6	2471.7	2411.1	2432.9	2479.0	2610.0	2492.3	2453.5	2029.0
30°	2955.6	2948.3	2861.0	2750.6	2616.0	2584.5	2578.4	2693.6	2635.4	2594.2	2132.1
32.5°	3281.8	3275.8	3182.4	3053.8	2868.3	2773.7	2715.5	2787.0	2797.9	2757.9	2244.9
35°	3579.0	3579.0	3498.9	3346.1	3136.3	2993.2	2897.4	2902.2	2984.7	2938.6	2373.5
37.5°	3843.4	3842.2	3754.8	3604.5	3403.1	3239.4	3120.5	3041.7	3163.0	3123.0	2508.1
40°	4053.2	4044.7	3980.4	3849.4	3646.9	3484.4	3364.3	3205.4	3361.9	3325.5	2651.2
42.5°	4206.0	4201.1	4157.5	4043.5	3850.6	3697.8	3615.4	3411.6	3587.5	3551.1	2818.6
45°	4265.4	4275.1	4275.1	4167.2	4014.4	3874.9	3838.5	3638.4	3831.2	3794.9	2998.0
47.5°	4169.6	4195.1	4247.2	4254.5	4119.9	4025.3	4037.4	3866.4	4082.3	4062.9	3194.5
50°	3870.1	3917.4	4031.4	4237.5	4162.3	4140.5	4207.2	4099.3	4351.5	4345.5	3433.4
52.5°	3097.5	3212.7	3568.1	3938.0	4133.2	4193.9	4375.8	4361.2	4698.4	4708.1	3745.1
55°	2375.9	2419.5	2830.7	3460.1	3955.0	4176.9	4488.6	4617.1	5074.4	5086.5	4031.4
57.5°	1921.1	1950.2	2174.6	2830.7	3548.7	4084.7	4577.1	4766.3	5363.0	5394.5	4286.0
60°	1522.1	1564.5	1714.9	2166.1	2979.9	3862.8	4639.0	4932.5	5673.5	5720.8	4590.5
62.5°	1131.5	1152.2	1294.1	1604.5	2358.9	3463.8	4606.2	5113.2	6054.3	6111.3	4956.7
65°	805.3	823.5	924.2	1141.2	1744.0	2924.1	4415.8	5247.8	6532.2	6590.4	5325.4
67.5°	602.8	610.0	667.0	798.0	1175.2	2271.6	4030.1	5224.8	6881.4	6933.6	5473.4
70°	476.6	479.1	507.0	577.3	764.1	1581.5	3354.6	4886.4	6906.9	6953.0	5286.6
72.5°	395.4	394.2	409.9	443.9	532.4	1000.6	2485.0	4258.2	6579.5	6611.0	4765.1
75°	326.2	328.7	339.6	359.0	406.3	659.8	1610.6	3397.1	5804.5	5770.5	3998.6
77.5°	274.1	272.9	277.7	294.7	328.7	474.2	943.6	2454.7	4301.8	4284.8	2624.5
80°	220.7	223.2	230.4	245.0	276.5	361.4	557.9	1531.8	2308.0	2246.1	1254.0
82.5°	148.0	171.0	185.6	202.5	238.9	266.8	354.1	778.6	1032.1	1016.3	568.8
85°	70.3	93.4	138.3	157.7	194.0	167.4	240.1	371.1	516.7	510.6	205.0
87.5°	14.6	14.6	74.0	88.5	120.1	71.6	133.4	161.3	249.8	234.1	83.7
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°	1153.4	1153.4	1153.4	1153.4	1153.4	1153.4	1153.4	1153.4	1153.4	1153.4	1153.4
2.5°	1159.4	1126.7	1061.2	1009.1	955.7	925.4	887.8	869.6	865.9	856.2	863.5
5°	1180.1	1115.8	992.1	910.8	856.2	829.6	816.2	811.4	810.2	807.7	807.7
7.5°	1208.0	1109.7	948.4	865.9	830.8	822.3	825.9	833.2	834.4	836.8	835.6
10°	1241.9	1110.9	924.2	855.0	838.0	839.3	851.4	861.1	865.9	869.6	868.4
12.5°	1289.2	1125.5	920.5	862.3	855.0	859.9	872.0	881.7	886.6	887.8	887.8
15°	1351.1	1155.8	929.0	878.1	872.0	875.6	882.9	886.6	887.8	886.6	886.6
17.5°	1419.0	1192.2	941.1	887.8	878.1	874.4	872.0	868.4	861.1	856.2	856.2
20°	1484.5	1224.9	947.2	886.6	869.6	855.0	840.5	822.3	810.2	800.4	800.4
22.5°	1550.0	1255.3	947.2	873.2	846.5	818.6	788.3	759.2	741.0	728.9	728.9
25°	1619.1	1284.4	939.9	850.2	810.2	770.1	728.9	692.5	674.3	662.2	659.8
27.5°	1677.3	1301.3	920.5	817.4	765.3	714.3	667.0	629.4	616.1	605.2	605.2
30°	1739.2	1312.3	884.1	775.0	714.3	656.1	607.6	577.3	562.7	547.0	545.8
32.5°	1808.3	1319.5	842.9	730.1	662.2	600.3	559.1	534.8	503.3	486.3	483.9
35°	1888.3	1329.2	799.2	679.2	610.0	554.3	530.0	490.0	459.7	445.1	443.9
37.5°	1973.2	1336.5	751.9	634.3	562.7	523.9	499.7	452.4	425.7	403.9	401.4
40°	2063.0	1336.5	703.4	590.6	525.1	510.6	464.5	422.1	377.2	366.3	363.8
42.5°	2162.4	1334.1	654.9	548.2	490.0	480.3	443.9	399.0	376.0	366.3	363.8
45°	2267.9	1325.6	608.8	499.7	453.6	434.2	406.3	394.2	384.5	384.5	384.5
47.5°	2388.0	1318.3	556.7	456.0	426.9	405.1	384.5	377.2	376.0	379.6	383.2
50°	2542.0	1315.9	513.0	424.5	406.3	380.8	378.4	372.3	373.5	373.5	373.5
52.5°	2728.8	1294.1	471.8	401.4	385.7	355.4	362.6	368.7	371.1	369.9	368.7
55°	2865.9	1255.3	436.6	385.7	371.1	345.6	355.4	365.1	367.5	363.8	363.8
57.5°	2989.6	1200.7	408.7	373.5	361.4	339.6	350.5	360.2	357.8	356.6	355.4
60°	3131.5	1148.5	386.9	367.5	351.7	337.2	346.9	352.9	349.3	346.9	345.6
62.5°	3285.5	1097.6	371.1	367.5	344.4	335.9	343.2	345.6	338.4	335.9	335.9
65°	3357.0	1017.5	354.1	367.5	340.8	333.5	335.9	333.5	326.2	326.2	325.0
67.5°	3239.4	885.3	332.3	362.6	345.6	329.9	325.0	321.4	312.9	312.9	310.5
70°	2914.4	727.7	300.8	346.9	346.9	328.7	310.5	302.0	292.3	295.9	291.1
72.5°	2489.9	577.3	262.0	320.2	339.6	327.5	294.7	281.4	272.9	276.5	269.2
75°	2016.9	447.5	215.9	277.7	321.4	321.4	278.9	260.8	251.1	251.1	242.6
77.5°	1285.6	331.1	175.9	230.4	288.6	312.9	265.6	237.7	223.2	219.5	213.5
80°	636.7	232.9	144.3	183.1	246.2	293.5	255.9	211.0	190.4	183.1	172.2
82.5°	338.4	161.3	115.2	143.1	196.5	264.4	243.8	181.9	156.5	145.5	133.4
85°	151.6	99.4	92.2	109.2	149.2	217.1	219.5	149.2	120.1	143.1	105.5
87.5°	55.8	44.9	44.9	55.8	86.1	91.0	155.2	95.8	76.4	52.2	41.2
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)