

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: P214886

Luminaire Tested: **ARCH-AF24-70-D-U-T4W-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214886
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-70-D-U-T4W-7050
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8421 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G3

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

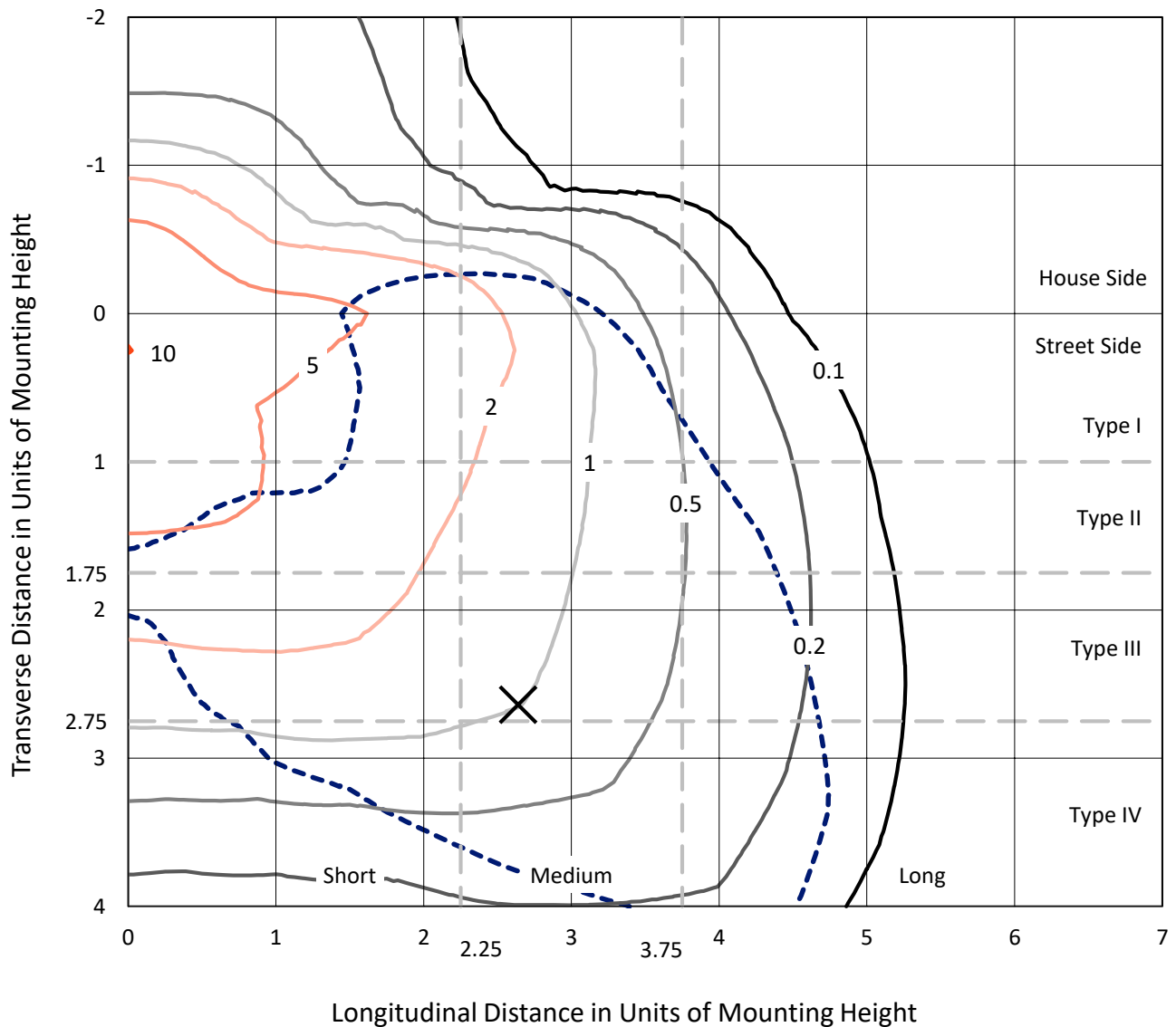


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

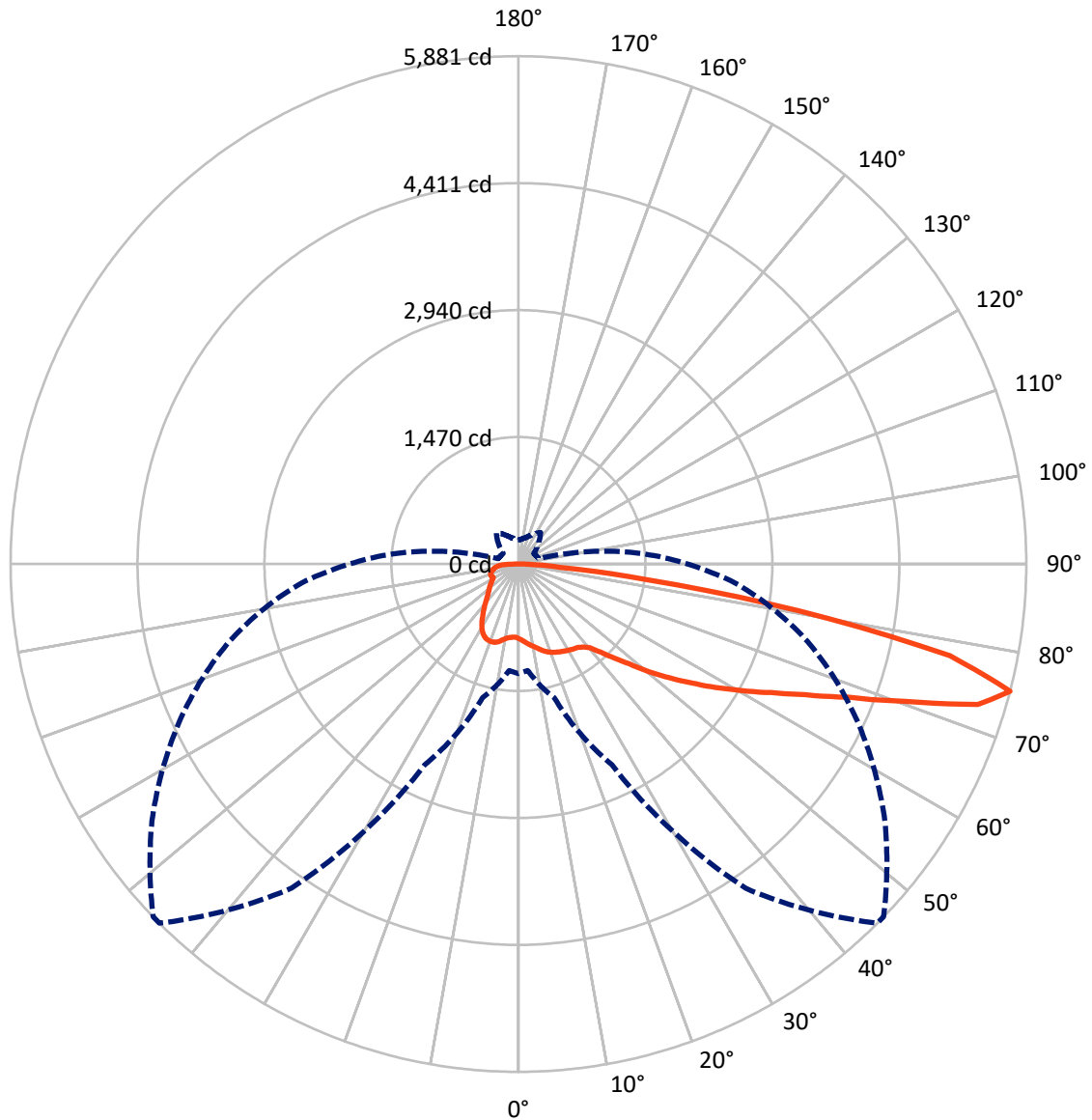


Based on 10 foot mounting height. Maximum calculated value = 10.1 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1950.8	0.0	1950.8
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	6470.2	0.0	6470.2
	% Fixture	76.8	0.0	76.8
Total	Lumens	8421.0	0.0	8421.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.6	1.0
10°-20°	277.2	3.3
20°-30°	475.7	5.6
30°-40°	665.4	7.9
40°-50°	976.0	11.6
50°-60°	1520.4	18.1
60°-70°	2187.7	26.0
70°-80°	1905.7	22.6
80°-90°	327.3	3.9
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°	8421.0	100.0
0°-180°	8421.0	100.0



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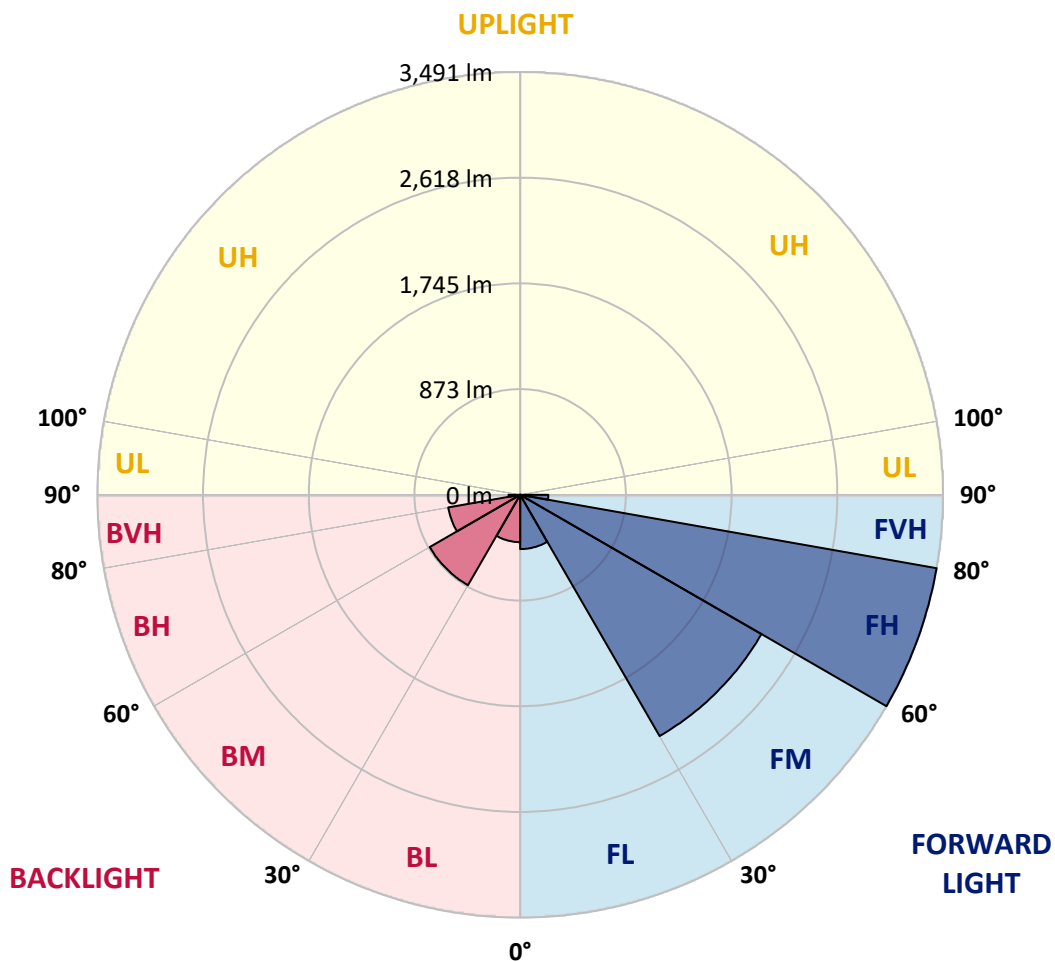
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	447.8	5.3			
FM	(30°-60°)	2299.6	27.3			
FH	(60°-80°)	3490.6	41.5			G2/5000
FVH	(80°-90°)	232.2	2.8			G3/500
BL	(0°-30°)	390.7	4.6	B1/500		
BM	(30°-60°)	862.1	10.2	B1/1000		
BH	(60°-80°)	602.9	7.2	B2/1000		G2/1000
BVH	(80°-90°)	95.1	1.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	863.3	863.3	863.3	863.3	863.3	863.3	863.3	863.3	863.3	863.3	863.3
2.5°	905.9	899.3	899.3	894.4	894.4	886.2	882.9	881.3	873.1	868.2	863.3
5°	958.3	950.1	948.5	937.0	932.1	914.1	912.4	900.9	886.2	871.5	860.0
7.5°	1005.8	1000.9	992.7	981.2	966.5	943.5	941.9	923.9	899.3	879.7	863.3
10°	1040.2	1036.9	1025.4	1010.7	994.3	971.4	969.7	950.1	920.6	897.7	874.7
12.5°	1081.1	1076.2	1061.5	1041.8	1023.8	1002.5	1000.9	984.5	951.7	922.2	892.8
15°	1120.5	1113.9	1095.9	1076.2	1056.6	1038.5	1038.5	1020.5	986.1	951.7	917.3
17.5°	1140.1	1136.8	1118.8	1097.5	1081.1	1068.0	1066.4	1050.0	1015.6	979.6	941.9
20°	1146.7	1148.3	1131.9	1109.0	1097.5	1091.0	1089.3	1077.9	1040.2	1005.8	969.7
22.5°	1145.0	1149.9	1136.8	1112.3	1109.0	1109.0	1109.0	1095.9	1066.4	1032.0	996.0
25°	1151.6	1158.1	1148.3	1118.8	1118.8	1125.4	1125.4	1118.8	1092.6	1063.1	1027.1
27.5°	1174.5	1179.4	1171.2	1130.3	1131.9	1141.7	1140.1	1141.7	1125.4	1097.5	1061.5
30°	1202.4	1208.9	1199.1	1148.3	1146.7	1156.5	1156.5	1164.7	1153.2	1123.7	1094.2
32.5°	1277.7	1276.1	1244.9	1168.0	1163.0	1172.9	1172.9	1181.1	1174.5	1151.6	1123.7
35°	1502.1	1477.6	1408.8	1231.8	1182.7	1187.6	1187.6	1202.4	1205.6	1187.6	1163.0
37.5°	1731.5	1723.3	1670.8	1402.2	1254.8	1218.7	1217.1	1238.4	1253.1	1238.4	1222.0
40°	1962.4	1955.9	1944.4	1629.9	1405.5	1274.4	1269.5	1287.5	1313.7	1303.9	1294.1
42.5°	2177.0	2173.7	2185.2	1854.3	1597.1	1394.0	1379.3	1358.0	1395.7	1392.4	1392.4
45°	2345.7	2353.9	2360.5	2064.0	1805.2	1548.0	1530.0	1457.9	1508.7	1521.8	1531.6
47.5°	2440.8	2447.3	2470.2	2268.8	2013.2	1726.5	1713.4	1595.5	1662.7	1702.0	1729.8
50°	2576.7	2558.7	2578.3	2468.6	2263.8	1959.2	1923.1	1780.6	1865.8	1934.6	2000.1
52.5°	2707.8	2678.3	2694.7	2699.6	2548.9	2186.8	2149.2	1998.5	2104.9	2213.1	2329.4
55°	2825.7	2824.1	2840.4	2924.0	2824.1	2430.9	2388.3	2239.3	2393.2	2509.5	2706.1
57.5°	2920.7	2937.1	3009.2	3184.4	3141.9	2696.3	2648.8	2519.4	2701.2	2817.5	3143.5
60°	3032.1	3058.3	3177.9	3405.6	3431.8	2974.8	2925.6	2832.3	3017.4	3135.3	3649.7
62.5°	3069.8	3107.5	3353.2	3638.2	3734.8	3279.5	3235.2	3173.0	3349.9	3456.4	4154.2
65°	2819.1	2891.2	3449.8	3757.8	4060.8	3646.4	3608.7	3554.6	3680.8	3751.2	4496.5
67.5°	2750.3	2783.1	3261.4	3929.8	4367.1	4118.2	4080.5	3987.1	3990.4	3960.9	4607.9
70°	2653.7	2689.7	3068.1	4059.2	4806.1	4763.6	4717.7	4442.5	4273.8	4095.2	4388.4
72.5°	2260.6	2249.1	2643.9	3710.3	5017.5	5562.9	5508.9	4932.3	4483.4	3978.9	3703.7
75°	1269.5	1236.8	1603.7	2566.9	4581.7	5880.7	5879.1	5179.6	4336.0	3466.2	2521.0
77.5°	368.6	358.7	529.1	1076.2	3084.5	5109.2	5171.4	4671.8	3618.5	2489.9	1384.2
80°	173.6	176.9	227.7	355.5	1317.0	3297.5	3476.0	3076.3	2162.3	1148.3	571.7
82.5°	109.8	111.4	155.6	229.3	556.9	1497.2	1644.6	1384.2	856.7	496.3	252.3
85°	68.8	68.8	103.2	150.7	332.5	478.3	519.3	471.8	366.9	270.3	137.6
87.5°	37.7	37.7	62.2	86.8	181.8	154.0	158.9	188.4	229.3	165.4	68.8
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°	863.3	863.3	863.3	863.3	863.3	863.3	863.3	863.3	863.3	863.3	863.3
2.5°	861.6	858.4	853.4	851.8	850.2	848.5	850.2	853.4	850.2	850.2	851.8
5°	856.7	853.4	846.9	846.9	848.5	850.2	858.4	863.3	864.9	864.9	864.9
7.5°	856.7	851.8	846.9	848.5	851.8	858.4	871.5	879.7	886.2	887.8	887.8
10°	864.9	858.4	855.1	858.4	868.2	873.1	886.2	899.3	907.5	910.8	910.8
12.5°	879.7	873.1	873.1	879.7	892.8	899.3	910.8	920.6	930.4	935.3	935.3
15°	904.2	896.0	897.7	909.1	923.9	930.4	938.6	941.9	950.1	956.6	956.6
17.5°	927.2	919.0	922.2	935.3	945.2	948.5	953.4	951.7	955.0	959.9	961.6
20°	953.4	945.2	946.8	955.0	956.6	953.4	953.4	948.5	946.8	955.0	958.3
22.5°	979.6	971.4	969.7	964.8	956.6	948.5	943.5	938.6	935.3	943.5	946.8
25°	1010.7	999.2	991.0	969.7	948.5	933.7	927.2	923.9	922.2	930.4	933.7
27.5°	1045.1	1033.6	1009.1	963.2	928.8	904.2	899.3	899.3	902.6	907.5	910.8
30°	1077.9	1066.4	1022.2	948.5	894.4	858.4	853.4	858.4	866.5	871.5	876.4
32.5°	1110.6	1099.2	1030.4	925.5	843.6	797.7	794.5	802.7	815.8	819.0	822.3
35°	1154.9	1143.4	1040.2	892.8	779.7	730.6	727.3	732.2	743.7	748.6	753.5
37.5°	1217.1	1210.5	1054.9	856.7	720.8	666.7	656.9	653.6	660.1	658.5	665.1
40°	1299.0	1303.9	1081.1	809.2	663.4	607.7	586.4	576.6	570.1	556.9	563.5
42.5°	1418.6	1421.9	1110.6	755.2	614.3	552.0	524.2	506.2	493.1	471.8	475.0
45°	1593.9	1566.0	1145.0	697.8	570.1	507.8	475.0	453.8	435.7	417.7	419.4
47.5°	1826.5	1741.3	1182.7	650.3	525.8	471.8	442.3	417.7	396.4	381.7	383.3
50°	2113.1	1959.2	1220.4	606.1	481.6	443.9	417.7	391.5	370.2	355.5	353.8
52.5°	2491.5	2221.2	1244.9	556.9	437.4	419.4	396.4	371.8	345.6	327.6	326.0
55°	2884.7	2525.9	1266.2	498.0	394.8	391.5	380.0	352.2	321.1	298.1	294.9
57.5°	3317.1	2851.9	1282.6	440.6	362.0	368.6	365.3	332.5	298.1	276.8	275.2
60°	3710.3	3189.4	1230.2	389.9	332.5	345.6	348.9	321.1	303.0	308.0	309.6
62.5°	4106.7	3449.8	1030.4	352.2	312.9	330.9	358.7	357.1	348.9	357.1	358.7
65°	4249.2	3503.9	730.6	321.1	293.2	337.4	389.9	386.6	348.9	334.2	330.9
67.5°	4168.9	3343.3	491.4	296.5	278.5	345.6	422.6	386.6	335.8	316.2	309.6
70°	3787.3	2948.6	360.4	271.9	265.4	344.0	440.6	385.0	329.3	308.0	299.8
72.5°	3020.6	2275.3	289.9	249.0	245.7	335.8	450.5	381.7	322.7	299.8	289.9
75°	1955.9	1415.3	244.1	226.1	216.2	322.7	445.6	371.8	314.5	285.0	278.5
77.5°	907.5	609.4	208.0	199.8	188.4	303.0	430.8	352.2	296.5	268.6	260.5
80°	422.6	288.3	175.3	173.6	168.7	286.7	411.2	329.3	275.2	252.3	239.2
82.5°	226.1	173.6	142.5	142.5	147.4	267.0	386.6	301.4	247.4	235.9	201.5
85°	119.6	99.9	103.2	111.4	126.1	235.9	353.8	271.9	216.2	180.2	175.3
87.5°	60.6	63.9	63.9	75.4	96.6	191.7	291.6	224.4	183.5	147.4	144.2
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)