

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: P234807

Luminaire Tested: **ARCH-M-AF48-60-D-U-T3-8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234807
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-60-D-U-T3-8027
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 2700K, 405mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6779 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 63
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

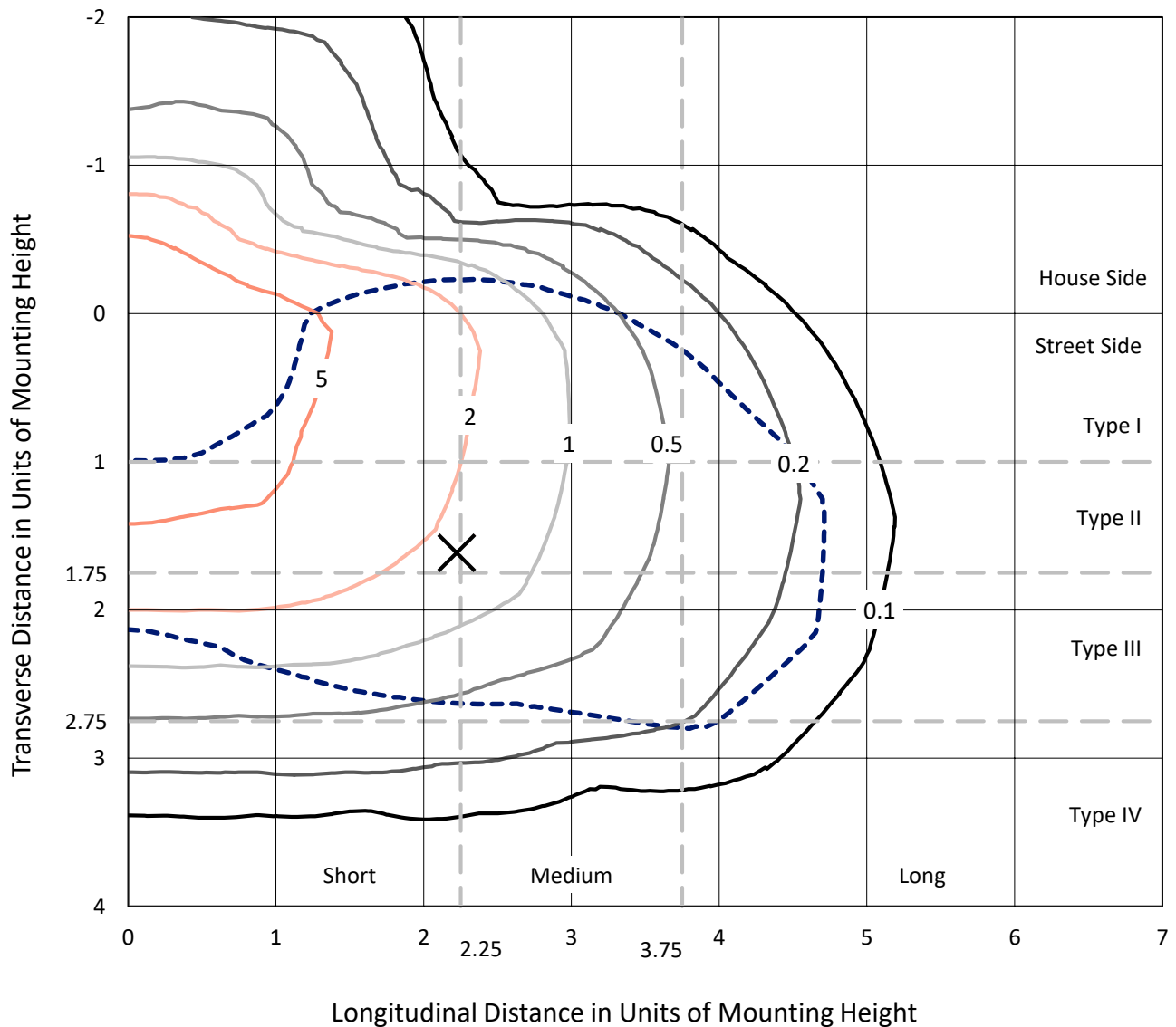


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

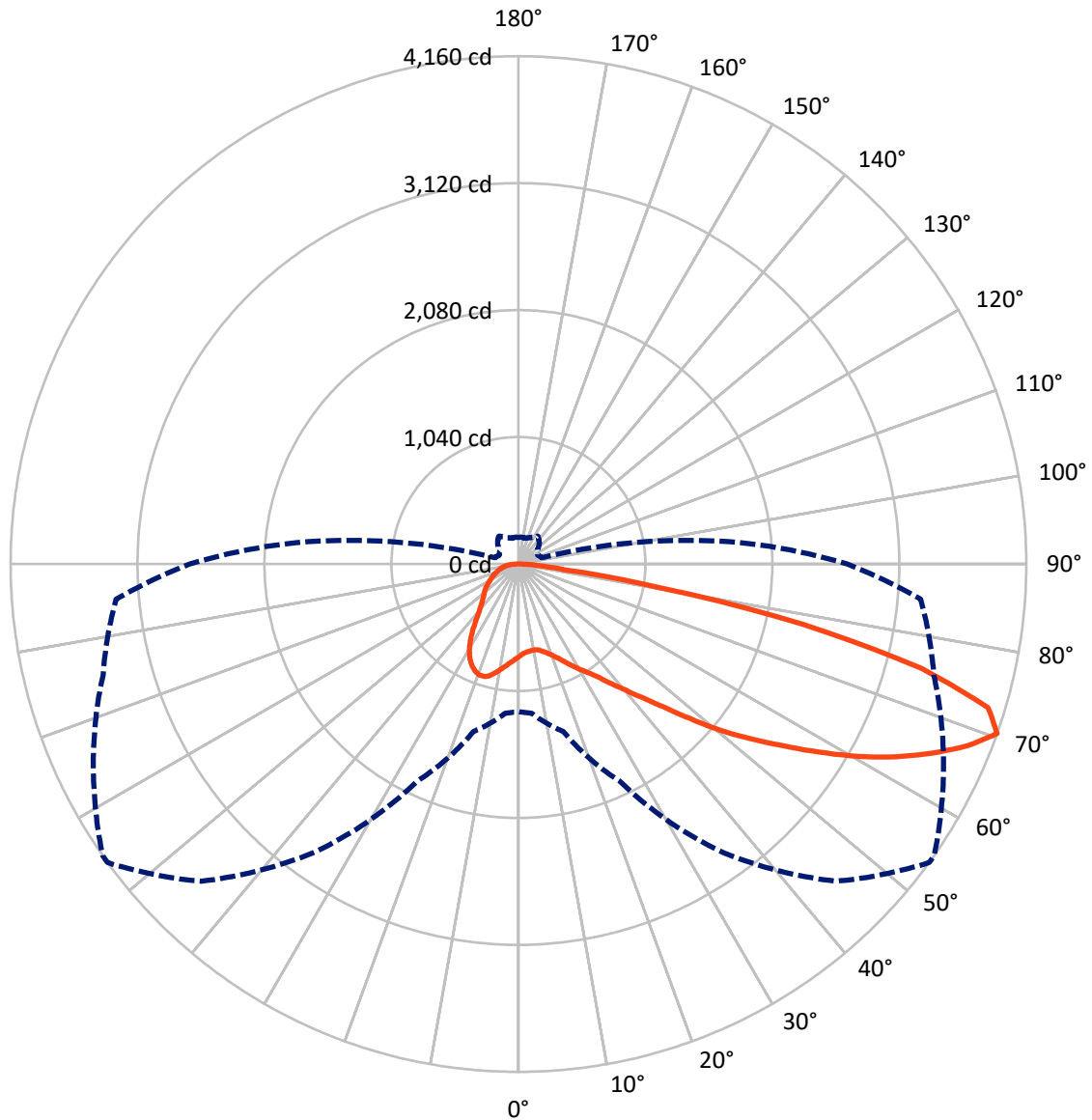


Based on 10 foot mounting height. Maximum calculated value = 8.8 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1537.5	0.0	1537.5
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	5241.5	0.0	5241.5
	% Fixture	77.3	0.0	77.3
Total	Lumens	6779.0	0.0	6779.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.4	1.1
10°-20°	237.8	3.5
20°-30°	413.2	6.1
30°-40°	603.8	8.9
40°-50°	947.7	14.0
50°-60°	1457.3	21.5
60°-70°	1780.5	26.3
70°-80°	1103.9	16.3
80°-90°	160.4	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°	6779.0	100.0
0°-180°	6779.0	100.0

Coefficient of Utilization



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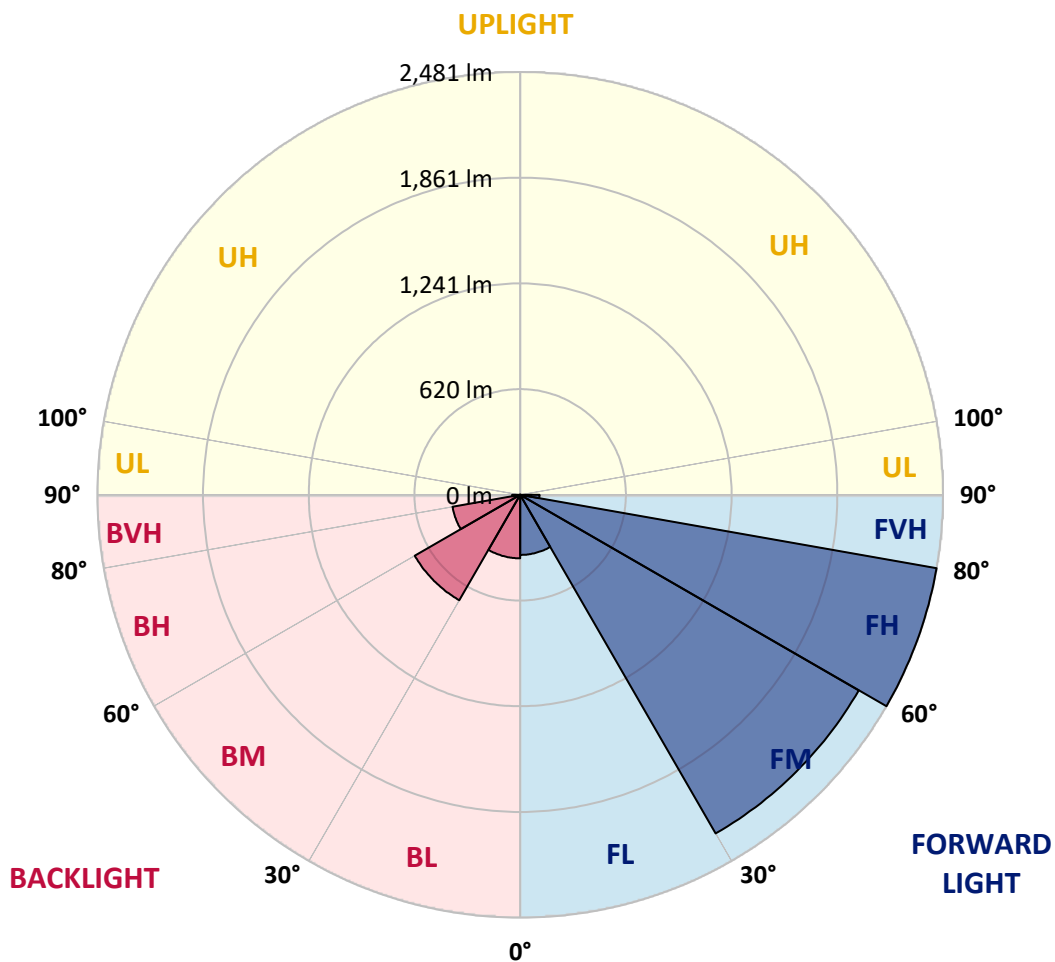
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	352.7	5.2			
FM	(30°-60°)	2294.4	33.8			
FH	(60°-80°)	2481.2	36.6			G2/5000
FVH	(80°-90°)	113.2	1.7			G2/225
BL	(0°-30°)	372.7	5.5	B1/500		
BM	(30°-60°)	714.4	10.5	B1/1000		
BH	(60°-80°)	403.2	5.9	B1/500		G1/500
BVH	(80°-90°)	47.1	0.7			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	758.4	758.4	758.4	758.4	758.4	758.4	758.4	758.4	758.4	758.4	758.4
2.5°	728.6	726.2	726.2	729.9	731.1	734.8	734.8	736.1	739.8	746.0	753.5
5°	706.3	705.1	706.3	711.3	713.7	721.2	723.7	724.9	732.4	742.3	753.5
7.5°	684.0	682.7	685.2	692.6	700.1	711.3	717.5	718.7	729.9	743.5	758.4
10°	676.5	675.3	679.0	685.2	692.6	705.1	715.0	716.2	732.4	748.5	769.6
12.5°	686.4	685.2	688.9	695.1	702.6	711.3	722.4	723.7	744.8	765.9	788.2
15°	711.3	711.3	712.5	716.2	723.7	731.1	741.1	742.3	764.6	789.5	811.8
17.5°	749.7	747.3	747.3	746.0	751.0	754.7	767.1	768.4	791.9	814.3	836.6
20°	796.9	795.7	790.7	784.5	783.3	785.7	798.2	799.4	823.0	841.6	862.7
22.5°	854.0	855.3	844.1	830.4	824.2	827.9	839.1	840.4	857.7	873.9	892.5
25°	929.7	926.0	909.9	890.0	877.6	877.6	888.8	888.8	904.9	914.8	927.2
27.5°	1001.7	994.3	979.4	950.8	931.0	934.7	945.9	945.9	960.8	964.5	970.7
30°	1079.9	1072.5	1053.9	1017.9	991.8	989.3	1003.0	1001.7	1021.6	1020.3	1015.4
32.5°	1175.5	1171.8	1140.8	1094.8	1060.1	1051.4	1063.8	1065.0	1077.4	1073.7	1057.6
35°	1309.6	1308.3	1279.8	1199.1	1153.2	1137.0	1144.5	1144.5	1153.2	1143.2	1115.9
37.5°	1478.4	1480.9	1456.0	1336.9	1272.3	1245.0	1246.3	1245.0	1247.5	1236.3	1207.8
40°	1647.2	1653.4	1652.2	1508.2	1426.3	1379.1	1361.7	1359.2	1365.4	1360.5	1333.2
42.5°	1869.4	1884.3	1849.5	1719.2	1627.3	1547.9	1500.7	1494.5	1508.2	1514.4	1488.3
45°	2100.3	2095.3	2040.7	1946.4	1863.2	1761.4	1672.0	1662.1	1672.0	1690.6	1663.3
47.5°	2220.7	2217.0	2203.3	2156.1	2143.7	2027.0	1891.7	1883.0	1864.4	1890.5	1858.2
50°	2419.3	2423.0	2367.2	2362.2	2414.3	2349.8	2140.0	2120.1	2086.6	2107.7	2080.4
52.5°	2563.3	2547.1	2512.4	2555.8	2718.4	2683.7	2373.4	2364.7	2333.6	2328.7	2316.3
55°	2621.6	2621.6	2627.8	2728.4	2960.5	2914.6	2626.6	2635.3	2593.1	2558.3	2574.5
57.5°	2639.0	2646.4	2699.8	2866.2	3244.8	3094.6	2905.9	2918.3	2857.5	2788.0	2838.8
60°	2553.4	2575.7	2703.5	2944.4	3404.9	3285.7	3200.1	3203.8	3115.7	3013.9	3103.2
62.5°	2333.6	2360.9	2589.3	2976.6	3378.8	3481.8	3478.1	3486.8	3366.4	3239.8	3351.5
65°	2064.3	2091.6	2334.9	2886.0	3359.0	3622.1	3732.6	3756.2	3601.0	3430.9	3506.7
67.5°	1668.3	1704.3	1935.2	2580.7	3262.1	3737.5	3970.9	3995.7	3782.2	3530.3	3493.0
70°	1209.0	1226.4	1420.0	1961.3	2867.4	3674.2	4159.6	4158.3	3841.8	3522.8	3306.8
72.5°	582.2	595.8	763.4	1217.7	2050.6	3118.1	4023.0	4046.6	3759.9	3414.8	2881.1
75°	239.6	253.2	309.1	513.9	1076.2	2060.6	3409.8	3465.7	3414.8	3064.8	2254.2
77.5°	149.0	153.9	181.2	265.6	491.6	962.0	2387.0	2462.7	2706.0	2455.3	1488.3
80°	111.7	115.4	135.3	186.2	310.3	355.0	1185.4	1281.0	1639.8	1408.9	674.0
82.5°	93.1	94.3	108.0	135.3	211.0	203.6	379.8	423.3	764.6	537.5	232.1
85°	86.9	89.4	96.8	96.8	134.1	127.9	157.6	165.1	222.2	183.7	80.7
87.5°	44.7	42.2	85.6	75.7	69.5	62.1	67.0	72.0	83.2	88.1	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	758.4	758.4	758.4	758.4	758.4	758.4	758.4	758.4	758.4	758.4	758.4
2.5°	756.0	759.7	765.9	772.1	779.5	788.2	793.2	799.4	804.4	801.9	800.6
5°	759.7	765.9	779.5	791.9	806.8	824.2	835.4	847.8	857.7	860.2	856.5
7.5°	765.9	777.1	795.7	818.0	837.9	860.2	877.6	895.0	907.4	909.9	909.9
10°	780.8	793.2	818.0	847.8	871.4	895.0	914.8	928.5	939.7	944.6	944.6
12.5°	801.9	816.8	846.6	882.6	908.6	931.0	942.1	948.4	953.3	958.3	959.5
15°	826.7	842.8	878.8	917.3	944.6	955.8	955.8	954.6	954.6	957.0	959.5
17.5°	851.5	868.9	906.1	947.1	964.5	958.3	949.6	945.9	943.4	942.1	945.9
20°	877.6	895.0	932.2	970.7	965.7	939.7	927.2	918.6	911.1	907.4	912.4
22.5°	906.1	922.3	960.8	986.8	949.6	909.9	886.3	872.6	860.2	852.8	857.7
25°	939.7	955.8	993.0	991.8	921.0	865.2	827.9	805.6	791.9	784.5	784.5
27.5°	979.4	993.0	1029.0	979.4	881.3	805.6	751.0	729.9	726.2	720.0	720.0
30°	1020.3	1031.5	1062.6	950.8	826.7	727.4	667.8	657.9	659.1	652.9	654.2
32.5°	1062.6	1073.7	1082.4	908.6	756.0	639.3	599.5	592.1	590.9	585.9	580.9
35°	1122.1	1138.3	1084.9	851.5	670.3	566.0	537.5	530.0	522.6	505.2	505.2
37.5°	1212.7	1230.1	1078.7	780.8	582.2	508.9	482.9	472.9	460.5	443.1	436.9
40°	1336.9	1336.9	1065.0	701.3	511.4	463.0	438.2	425.8	412.1	394.7	391.0
42.5°	1483.4	1448.6	1043.9	620.6	459.3	432.0	409.6	396.0	379.8	360.0	357.5
45°	1654.7	1560.3	1014.1	548.7	420.8	413.4	399.7	376.1	348.8	327.7	324.0
47.5°	1821.0	1660.9	985.6	497.8	388.5	405.9	394.7	355.0	317.8	288.0	284.3
50°	2003.5	1750.2	952.1	455.6	363.7	400.9	388.5	324.0	283.0	261.9	259.4
52.5°	2185.9	1840.8	916.1	410.9	342.6	391.0	373.6	301.6	281.8	253.2	249.5
55°	2378.3	1946.4	873.9	361.2	317.8	371.1	353.8	300.4	290.5	253.2	244.5
57.5°	2565.8	2063.0	805.6	312.8	290.5	341.4	346.3	292.9	271.8	250.7	240.8
60°	2773.1	2187.2	692.6	271.8	266.9	316.5	336.4	276.8	250.7	243.3	238.3
62.5°	2939.4	2298.9	541.2	243.3	247.0	296.7	324.0	266.9	242.1	235.8	234.6
65°	3011.4	2301.4	388.5	218.5	227.2	278.1	311.6	258.2	234.6	232.1	230.9
67.5°	2935.7	2174.8	273.1	194.9	206.1	260.7	295.4	249.5	227.2	228.4	225.9
70°	2691.1	1907.9	199.8	172.5	186.2	242.1	278.1	238.3	218.5	221.0	217.2
72.5°	2251.7	1487.1	160.1	153.9	170.1	222.2	260.7	225.9	204.8	206.1	198.6
75°	1663.3	985.6	134.1	137.8	151.4	203.6	238.3	209.8	189.9	185.0	180.0
77.5°	989.3	506.4	110.5	120.4	135.3	181.2	213.5	189.9	173.8	165.1	161.4
80°	408.4	204.8	90.6	101.8	117.9	161.4	188.7	166.3	155.2	146.5	141.5
82.5°	162.6	100.5	72.0	83.2	99.3	140.3	165.1	146.5	135.3	129.1	115.4
85°	62.1	49.7	48.4	58.3	74.5	108.0	136.5	122.9	114.2	98.1	94.3
87.5°	24.8	22.3	22.3	28.5	42.2	68.3	98.1	85.6	89.4	70.8	72.0
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)