

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: P265824

Luminaire Tested: **ARCH-M-AF48-120-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265824
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-M-AF48-120-D-U-T2R-7027
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 785mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13363.9 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 122
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

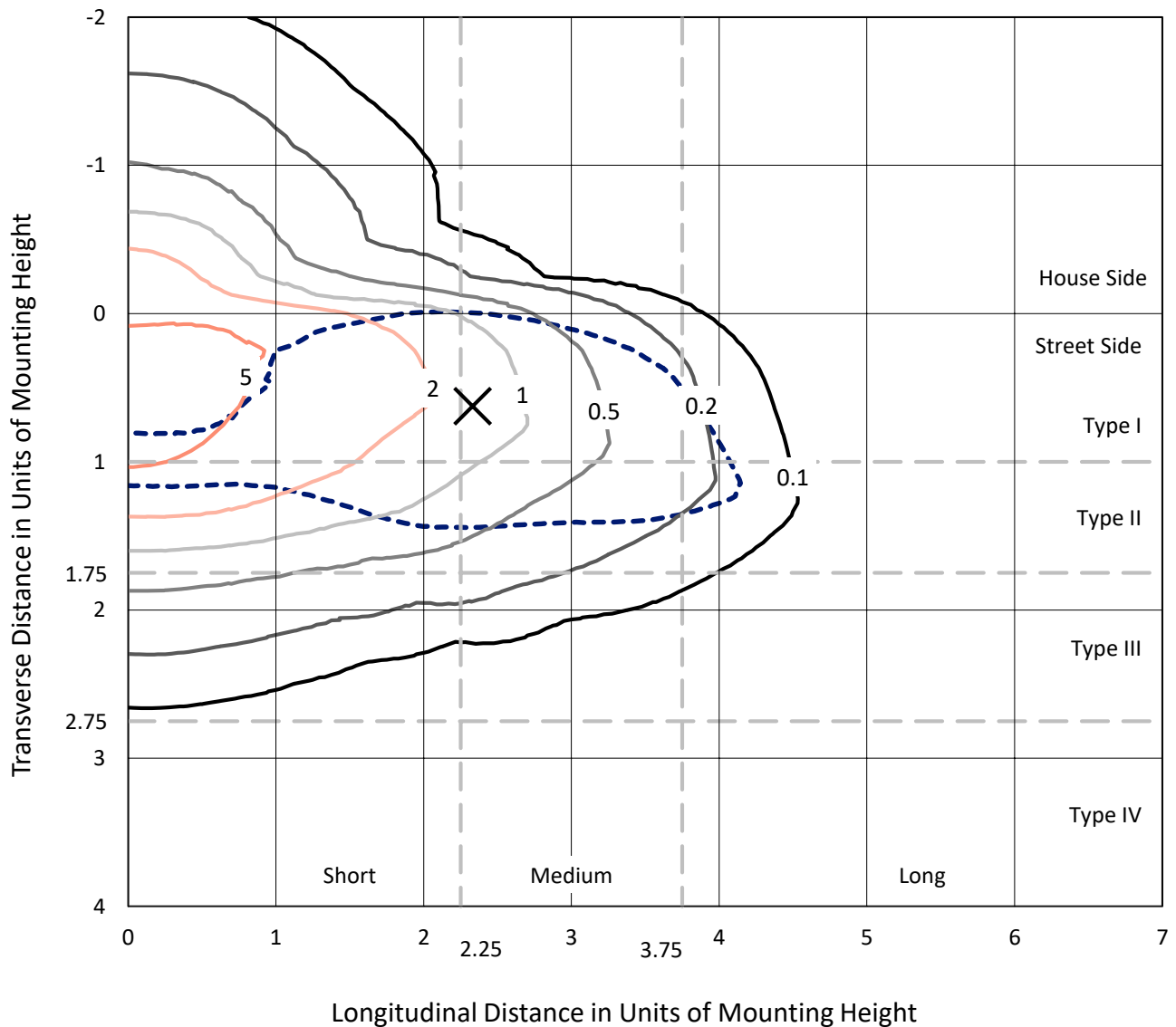


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

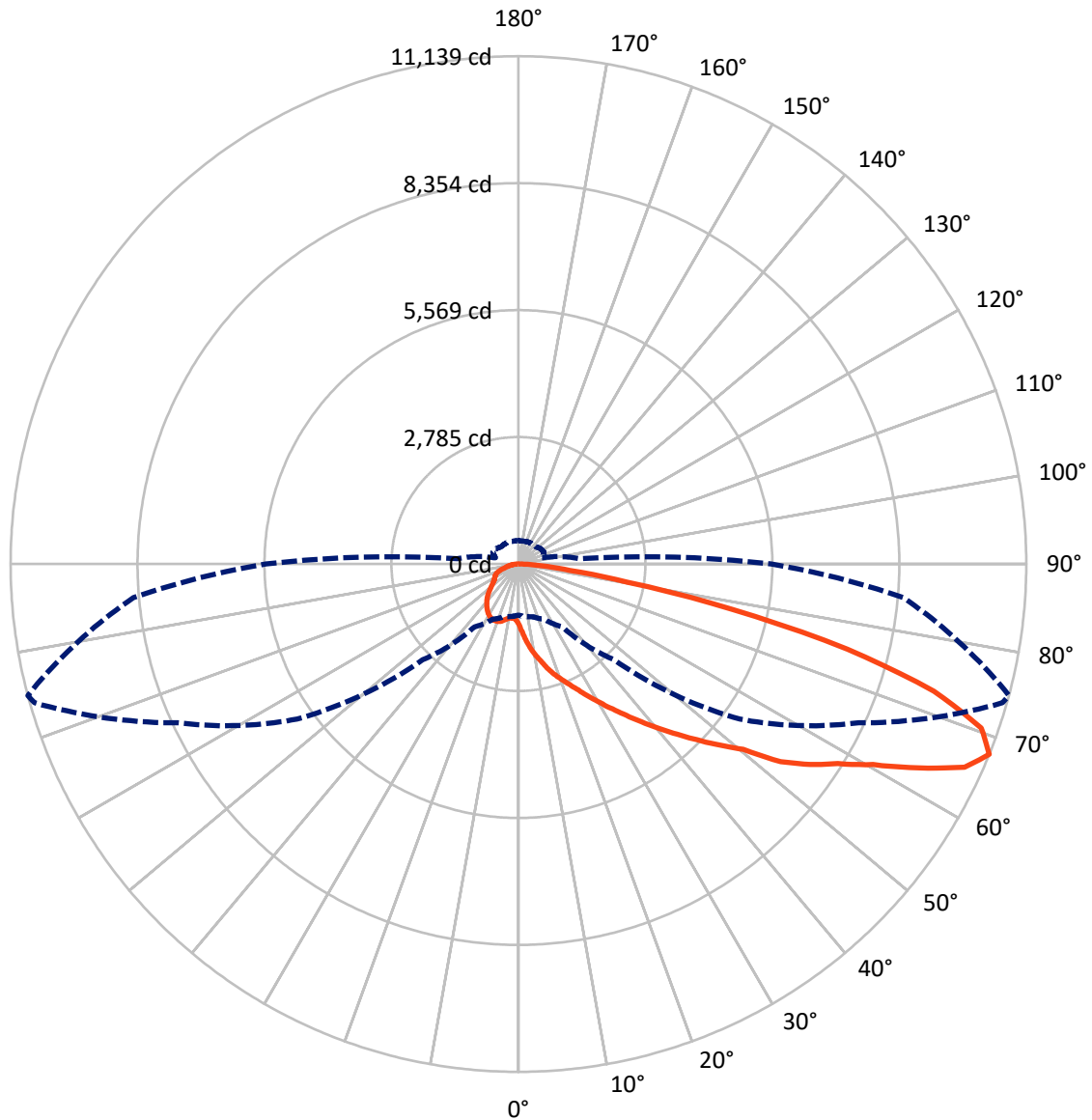


Based on 20 foot mounting height. Maximum calculated value = 6.9 fc
 Type II - Medium - Semi-Cutoff

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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	2282.1	0.0	2282.1
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	11081.8	0.0	11081.8
	% Fixture	82.9	0.0	82.9
Total	Lumens	13363.9	0.0	13363.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.6	1.2
10°-20°	562.2	4.2
20°-30°	1025.4	7.7
30°-40°	1683.1	12.6
40°-50°	2434.0	18.2
50°-60°	2868.5	21.5
60°-70°	2787.5	20.9
70°-80°	1549.5	11.6
80°-90°	298.0	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°	13363.9	100.0
0°-180°	13363.9	100.0



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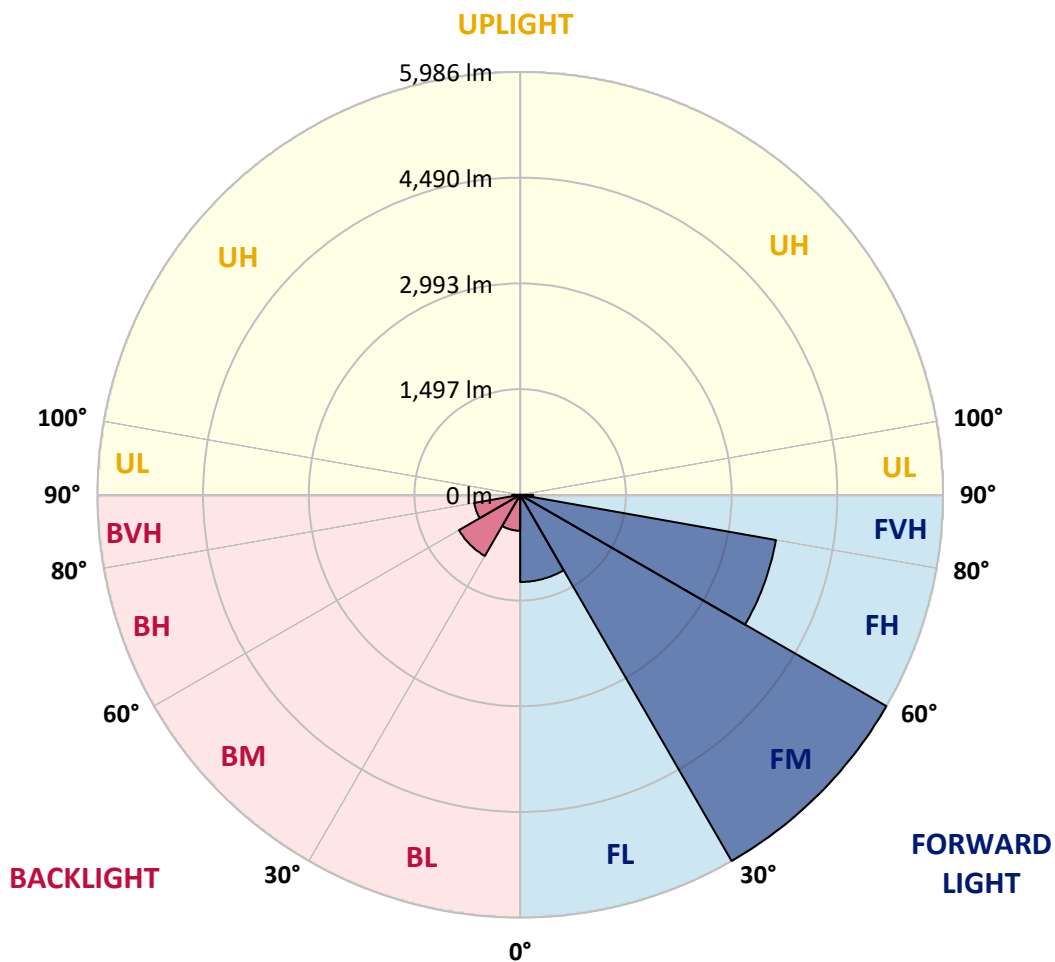
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1233.8	9.2			
FM	(30°-60°)	5986.3	44.8			
FH	(60°-80°)	3676.2	27.5			G2/5000
FVH	(80°-90°)	185.4	1.4			G2/225
BL	(0°-30°)	509.4	3.8	B2/1000		
BM	(30°-60°)	999.4	7.5	B1/1000		
BH	(60°-80°)	660.8	4.9	B2/1000		G2/1000
BVH	(80°-90°)	112.5	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1324.2	1324.2	1324.2	1324.2	1324.2	1324.2	1324.2	1324.2	1324.2	1324.2	1324.2
2.5°	1877.4	1882.9	1871.8	1846.6	1810.4	1743.3	1684.6	1581.2	1489.1	1477.9	1380.1
5°	2207.0	2212.6	2198.6	2167.9	2128.9	2056.2	1975.2	1841.0	1692.9	1665.1	1458.3
7.5°	2433.2	2436.2	2419.3	2388.7	2358.0	2285.3	2204.3	2053.3	1871.8	1849.4	1558.9
10°	2626.1	2631.7	2609.3	2589.8	2556.2	2483.6	2399.8	2240.6	2053.3	2022.7	1662.3
12.5°	2804.9	2810.4	2796.6	2779.7	2768.5	2701.6	2609.3	2419.3	2218.3	2184.7	1785.2
15°	2925.1	2930.6	2933.4	2955.8	2969.7	2922.2	2830.0	2623.3	2396.9	2366.2	1930.5
17.5°	2891.6	2905.5	2947.3	3028.4	3115.1	3117.7	3042.4	2824.5	2573.0	2539.5	2078.6
20°	2793.6	2804.9	2855.3	2978.2	3148.5	3246.4	3240.7	3028.4	2737.9	2701.6	2215.4
22.5°	2874.8	2888.7	2888.7	2964.1	3131.9	3313.4	3386.0	3229.5	2902.8	2869.1	2352.3
25°	3221.1	3229.5	3170.8	3140.1	3201.6	3369.3	3506.2	3447.4	3103.9	3064.7	2500.4
27.5°	3704.5	3690.4	3617.8	3494.9	3427.9	3472.6	3612.3	3654.1	3335.6	3288.2	2654.0
30°	4185.1	4176.6	4092.8	3928.0	3777.2	3682.2	3729.7	3838.5	3587.1	3531.2	2802.2
32.5°	4634.7	4620.8	4528.6	4335.8	4165.4	3989.5	3897.2	4006.3	3855.3	3791.0	2966.9
35°	5048.3	5012.0	4919.7	4718.5	4542.5	4374.9	4148.7	4165.4	4145.9	4078.8	3148.5
37.5°	5383.5	5355.5	5255.1	5067.8	4880.6	4721.4	4483.9	4347.1	4458.7	4394.5	3358.0
40°	5679.7	5648.9	5545.5	5358.4	5185.1	5034.3	4847.2	4567.7	4810.9	4738.2	3592.7
42.5°	5903.1	5880.8	5797.0	5612.6	5444.9	5308.1	5215.9	4847.2	5176.8	5107.0	3849.7
45°	6023.2	6000.9	5956.2	5808.1	5654.6	5548.3	5556.7	5179.5	5559.5	5500.9	4154.3
47.5°	5875.3	5892.0	5931.1	5903.1	5808.1	5757.9	5861.3	5523.1	5986.9	5931.1	4483.9
50°	5478.6	5495.2	5651.6	5844.6	5878.0	5939.5	6135.1	5919.9	6439.5	6394.9	4891.8
52.5°	4503.6	4595.6	5028.7	5489.7	5805.3	6059.5	6439.5	6509.4	7202.3	7202.3	5612.6
55°	3402.8	3483.7	3978.2	4782.8	5523.1	6070.7	6663.1	6908.9	7752.6	7763.8	5989.8
57.5°	2757.3	2807.7	3050.7	3874.8	4930.9	5931.1	6928.4	7252.6	8210.8	8261.1	6475.8
60°	2237.8	2265.7	2425.0	2997.6	4112.4	5554.0	7118.3	7744.2	8864.6	8934.4	7096.2
62.5°	1799.1	1827.2	1933.2	2276.8	3226.7	4847.2	7084.9	8255.5	9736.1	9850.6	7909.0
65°	1436.0	1466.8	1536.6	1748.9	2391.5	3969.9	6741.3	8518.1	10638.4	10750.2	8448.2
67.5°	1120.2	1148.3	1195.7	1335.4	1684.6	2969.7	5928.3	8241.5	11043.7	11138.7	8476.1
70°	846.6	860.4	899.7	988.9	1204.1	1972.4	4640.4	7314.0	10680.4	10767.1	7917.4
72.5°	656.5	653.7	676.1	720.8	841.0	1357.8	3075.8	5947.9	9442.9	9532.3	6755.3
75°	536.4	533.7	547.5	561.5	609.1	910.7	1816.0	4478.3	7621.3	7450.9	5067.8
77.5°	452.6	449.8	463.7	466.6	486.2	628.5	1033.7	2947.3	5084.5	4791.2	2855.3
80°	382.8	380.0	396.7	402.4	416.3	461.0	595.0	1595.2	2553.4	2419.3	1363.4
82.5°	287.7	299.0	329.7	343.6	360.4	340.8	368.8	704.0	1184.5	1131.4	592.3
85°	139.6	164.7	248.7	276.6	296.1	215.1	251.4	332.5	533.7	508.5	240.2
87.5°	47.5	42.0	148.1	176.0	192.7	97.7	139.6	184.4	220.8	201.1	75.5
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°	1324.2	1324.2	1324.2	1324.2	1324.2	1324.2	1324.2	1324.2	1324.2	1324.2	1324.2
2.5°	1338.1	1296.3	1234.8	1187.3	1156.6	1131.4	1120.2	1117.5	1111.9	1109.0	1109.0
5°	1366.1	1290.8	1195.7	1145.3	1131.4	1120.2	1125.8	1128.7	1128.7	1128.7	1128.7
7.5°	1408.1	1301.9	1187.3	1153.9	1151.0	1151.0	1167.7	1176.2	1181.7	1181.7	1181.7
10°	1463.9	1321.4	1201.4	1173.4	1181.7	1187.3	1207.0	1218.0	1223.6	1226.5	1229.2
12.5°	1539.3	1363.4	1229.2	1207.0	1218.0	1220.8	1234.8	1240.4	1245.9	1248.9	1248.9
15°	1639.9	1424.8	1273.9	1245.9	1248.9	1245.9	1245.9	1240.4	1237.7	1237.7	1243.3
17.5°	1743.3	1483.6	1313.1	1273.9	1262.7	1240.4	1223.6	1209.7	1201.4	1195.7	1198.5
20°	1846.6	1536.6	1335.4	1279.5	1248.9	1212.5	1181.7	1162.1	1151.0	1139.8	1145.3
22.5°	1950.0	1586.9	1343.8	1262.7	1218.0	1165.0	1131.4	1100.8	1075.6	1058.8	1061.5
25°	2064.6	1642.7	1343.8	1243.3	1176.2	1120.2	1078.3	1028.1	991.8	977.8	983.4
27.5°	2179.1	1690.3	1329.9	1207.0	1128.7	1072.8	1011.3	952.7	930.4	921.9	924.7
30°	2293.6	1726.5	1299.0	1162.1	1078.3	1016.9	935.9	896.8	868.8	846.6	849.3
32.5°	2408.1	1751.7	1257.2	1106.4	1025.2	947.1	880.0	835.3	784.9	757.1	759.8
35°	2539.5	1771.2	1207.0	1050.5	966.7	885.5	835.3	762.8	709.7	687.3	681.6
37.5°	2676.4	1785.2	1153.9	988.9	907.9	841.0	790.6	701.2	650.9	620.2	617.5
40°	2824.5	1790.9	1089.6	924.7	852.1	813.0	731.9	664.9	578.2	558.7	558.7
42.5°	3000.5	1787.9	1025.2	860.4	790.6	748.6	690.1	659.4	583.9	564.3	553.1
45°	3201.6	1787.9	955.4	784.9	729.2	667.7	642.6	623.1	572.7	581.2	586.8
47.5°	3430.6	1782.3	871.6	723.6	678.8	625.8	611.8	570.0	550.3	556.0	561.5
50°	3746.4	1790.9	796.2	673.3	642.6	597.8	581.2	558.7	550.3	553.1	550.3
52.5°	4185.1	1762.8	723.6	642.6	614.6	556.0	556.0	553.1	556.0	553.1	553.1
55°	4425.3	1701.4	670.5	625.8	595.0	536.4	547.5	553.1	558.7	556.0	556.0
57.5°	4766.0	1659.4	628.5	614.6	583.9	530.8	541.9	553.1	556.0	553.1	553.1
60°	5168.4	1631.5	600.6	617.5	575.5	530.8	544.8	553.1	550.3	547.5	547.5
62.5°	5635.0	1620.4	581.2	625.8	567.1	533.7	544.8	553.1	541.9	539.3	539.3
65°	5811.0	1519.8	556.0	631.4	572.7	533.7	541.9	544.8	530.8	528.1	525.1
67.5°	5539.9	1346.6	519.6	620.2	589.5	533.7	533.7	530.8	514.0	511.2	505.7
70°	4933.8	1117.5	463.7	583.9	600.6	536.4	522.5	508.5	491.7	491.7	480.6
72.5°	4039.8	880.0	391.1	519.6	592.3	544.8	500.0	480.6	461.0	461.0	449.8
75°	2911.0	656.5	312.9	433.1	556.0	541.9	472.1	446.9	424.7	421.8	407.9
77.5°	1659.4	461.0	254.2	338.0	494.4	528.1	446.9	407.9	382.8	374.4	366.0
80°	852.1	310.2	206.7	265.4	410.6	488.9	427.5	363.2	335.2	321.2	307.3
82.5°	405.0	206.7	159.2	195.7	310.2	427.5	402.4	312.9	282.2	265.4	248.7
85°	181.5	122.9	106.2	125.8	220.8	332.5	354.8	257.1	220.8	276.6	203.9
87.5°	58.7	55.9	55.9	58.7	106.2	145.3	259.8	190.0	176.0	145.3	122.9
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)