

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: P265572

Luminaire Tested: **ARCH-L-AF72-90-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265572
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-L-AF72-90-D-U-T2R-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 400mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11439.2 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 93
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

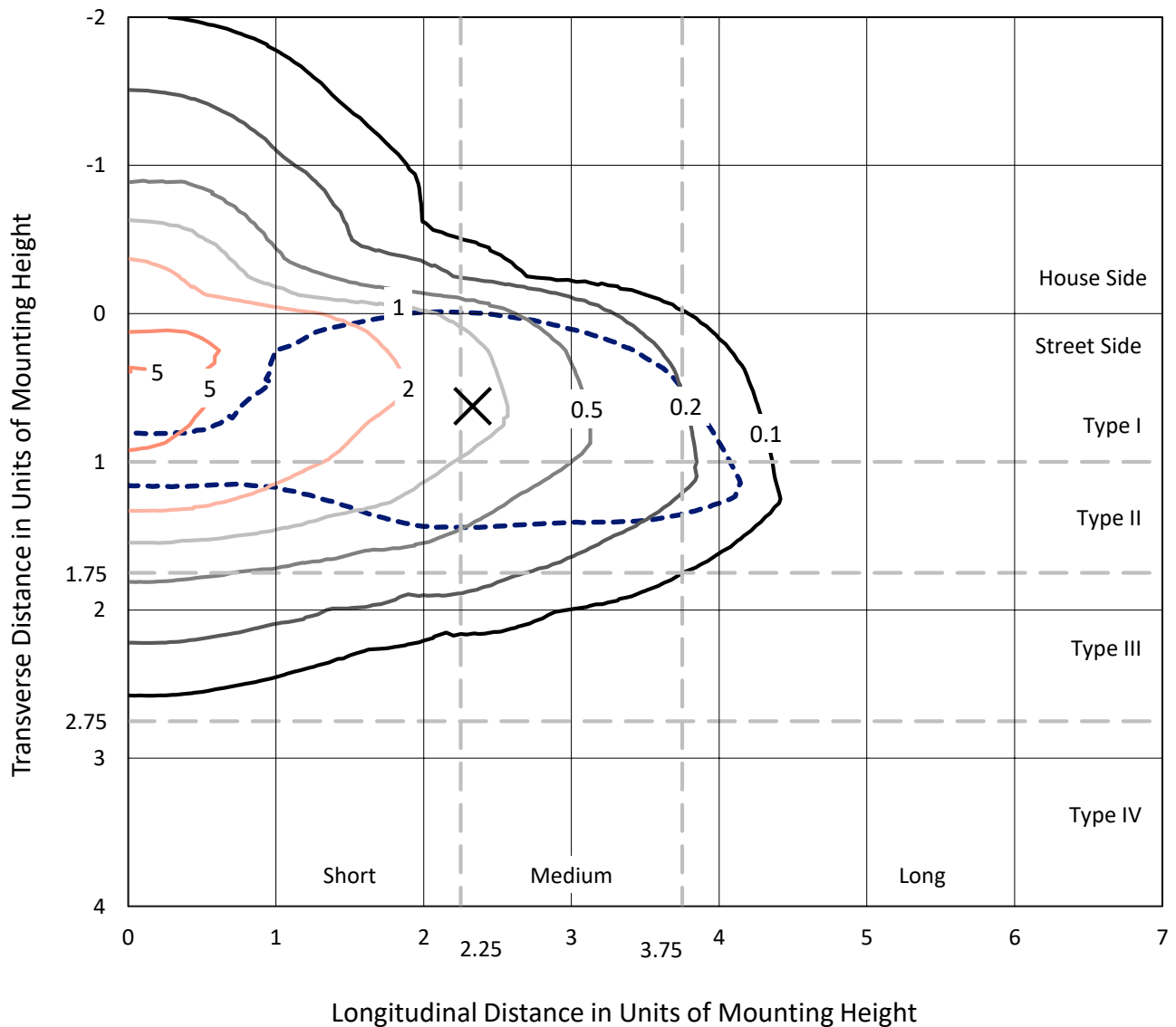


REPORT NUMBER: P265572

CATALOG NUMBER: ARCH-L-AF72-90-D-U-T2R-7027

Iso-Footcandle Lines of Horizontal Illumination

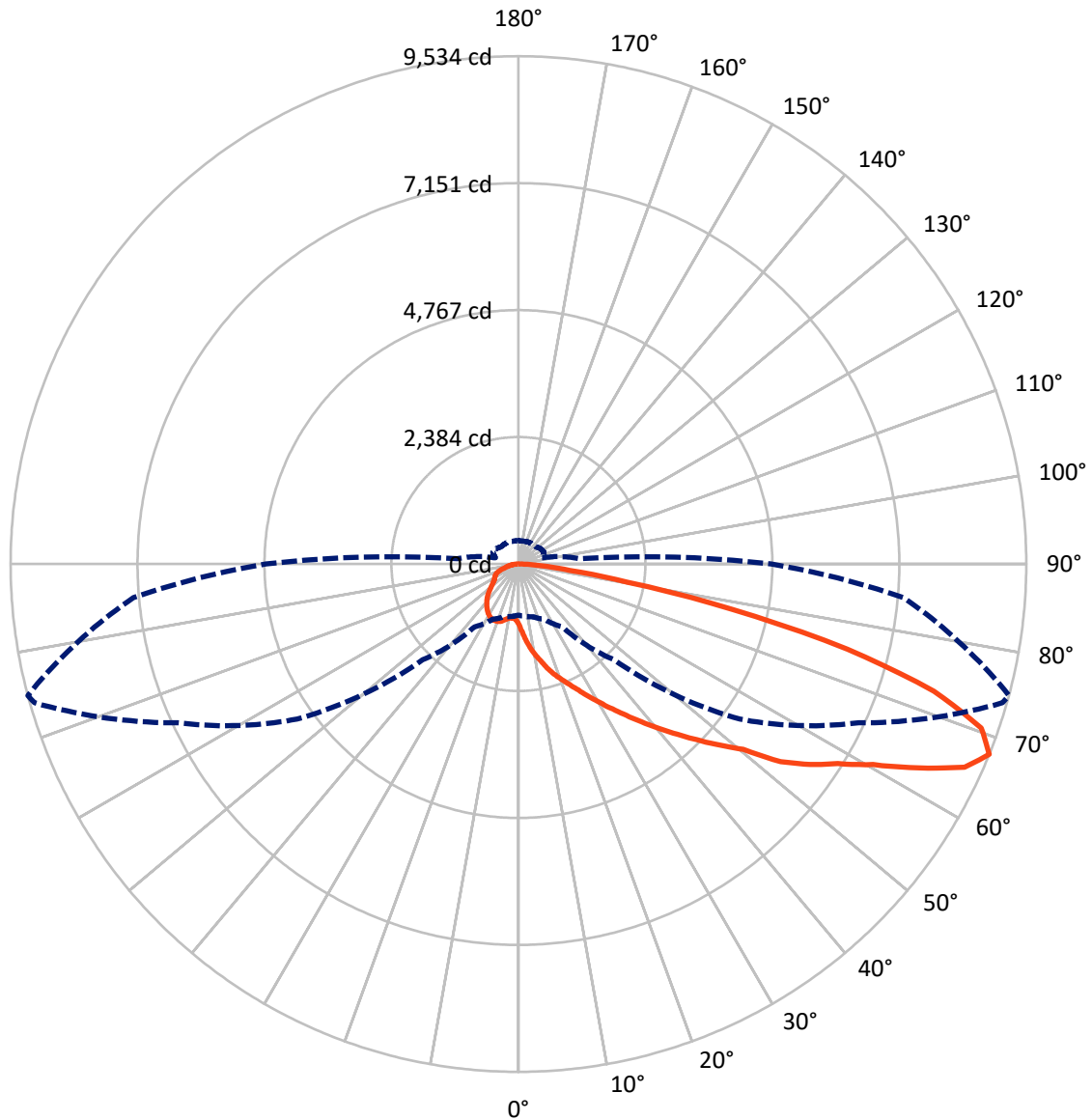
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.9 fc
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P265572
CATALOG NUMBER: ARCH-L-AF72-90-D-U-T2R-7027

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P265572

CATALOG NUMBER: ARCH-L-AF72-90-D-U-T2R-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1953.4	0.0	1953.4
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	9485.8	0.0	9485.8
	% Fixture	82.9	0.0	82.9
Total	Lumens	11439.2	0.0	11439.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.2	1.2
10°-20°	481.2	4.2
20°-30°	877.7	7.7
30°-40°	1440.7	12.6
40°-50°	2083.5	18.2
50°-60°	2455.4	21.5
60°-70°	2386.1	20.9
70°-80°	1326.3	11.6
80°-90°	255.0	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°	11439.2	100.0
0°-180°	11439.2	100.0



REPORT NUMBER: P265572

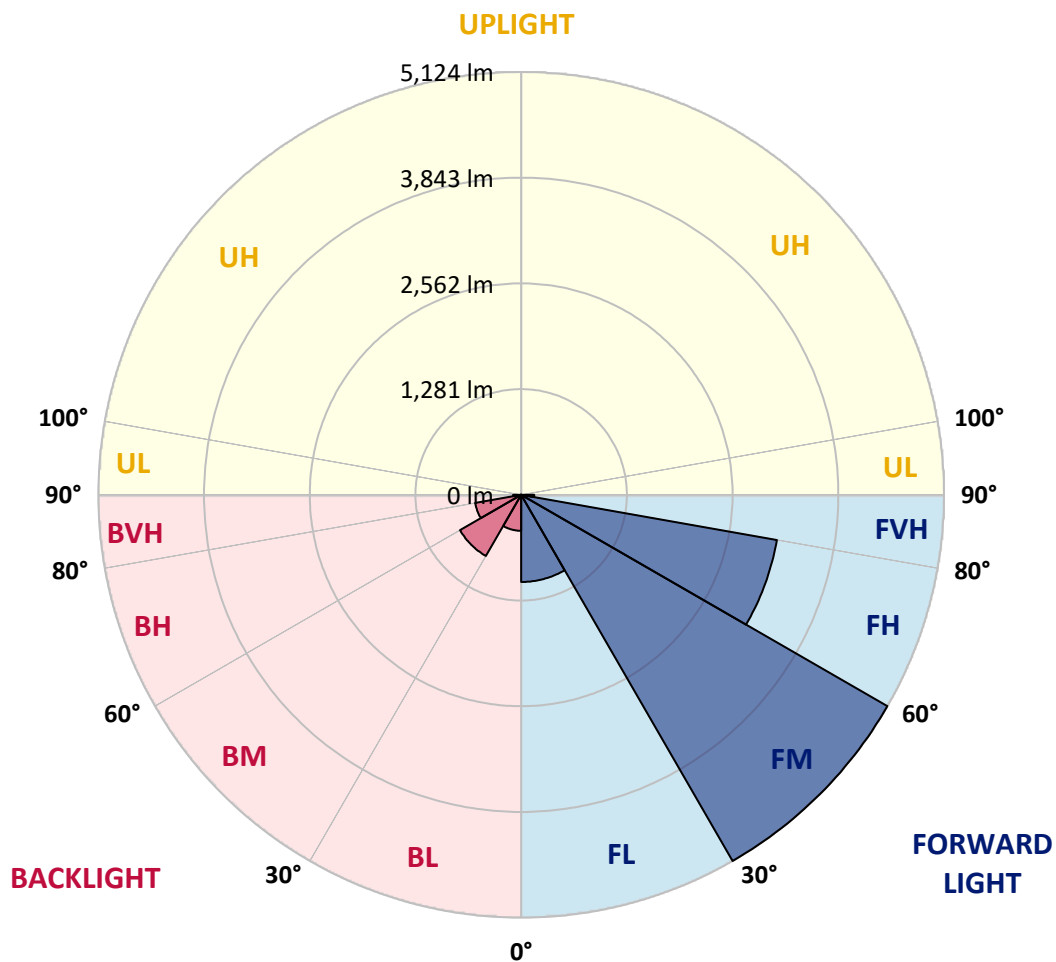
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1056.1	9.2			
FM	(30°-60°)	5124.1	44.8			
FH	(60°-80°)	3146.8	27.5			G2/5000
FVH	(80°-90°)	158.7	1.4			G2/225
BL	(0°-30°)	436.0	3.8	B1/500		
BM	(30°-60°)	855.5	7.5	B1/1000		
BH	(60°-80°)	565.6	4.9	B2/1000		G2/1000
BVH	(80°-90°)	96.3	0.8			G1/100
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





REPORT NUMBER: P265572

CATALOG NUMBER: ARCH-L-AF72-90-D-U-T2R-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5
2.5°	1607.0	1611.7	1602.1	1580.7	1549.5	1492.3	1442.0	1353.6	1274.5	1265.1	1181.4
5°	1889.1	1893.9	1881.9	1855.7	1822.2	1760.0	1690.7	1575.8	1449.1	1425.3	1248.3
7.5°	2082.9	2085.2	2071.0	2044.6	2018.3	1956.1	1886.8	1757.7	1602.1	1583.2	1334.4
10°	2247.9	2252.7	2233.5	2216.7	2188.1	2125.8	2054.2	1917.9	1757.7	1731.4	1422.8
12.5°	2400.9	2405.8	2393.8	2379.4	2369.9	2312.4	2233.5	2071.0	1898.7	1870.0	1528.0
15°	2503.8	2508.5	2510.9	2530.0	2542.1	2501.4	2422.5	2245.6	2051.8	2025.5	1652.4
17.5°	2475.1	2487.0	2522.9	2592.2	2666.3	2668.8	2604.1	2417.7	2202.5	2173.8	1779.2
20°	2391.4	2400.9	2444.0	2549.2	2695.1	2778.7	2774.0	2592.2	2343.6	2312.4	1896.3
22.5°	2460.6	2472.7	2472.7	2537.3	2680.7	2836.2	2898.3	2764.4	2484.6	2456.0	2013.6
25°	2757.3	2764.4	2714.1	2687.9	2740.5	2884.0	3001.1	2950.9	2656.7	2623.3	2140.3
27.5°	3170.9	3159.0	3096.8	2991.5	2934.3	2972.5	3092.1	3127.9	2855.4	2814.6	2271.9
30°	3582.4	3575.2	3503.4	3362.3	3233.1	3151.9	3192.4	3285.7	3070.5	3022.6	2398.6
32.5°	3967.3	3955.3	3876.5	3711.3	3565.6	3414.8	3335.9	3429.2	3300.2	3245.0	2539.7
35°	4321.1	4290.1	4211.3	4039.0	3888.4	3744.9	3551.2	3565.6	3548.8	3491.4	2695.1
37.5°	4608.1	4584.3	4498.2	4337.9	4177.7	4041.5	3838.2	3721.0	3816.5	3761.7	2874.4
40°	4861.6	4835.3	4746.9	4586.7	4438.3	4309.3	4149.0	3910.0	4117.9	4055.8	3075.3
42.5°	5053.0	5033.8	4962.1	4804.2	4660.8	4543.5	4464.7	4149.0	4431.2	4371.4	3295.3
45°	5155.8	5136.7	5098.4	4971.7	4840.2	4749.2	4756.4	4433.7	4758.9	4708.6	3556.0
47.5°	5029.0	5043.4	5077.0	5053.0	4971.7	4928.6	5017.2	4727.7	5124.7	5077.0	3838.2
50°	4689.5	4703.9	4837.7	5002.8	5031.4	5084.0	5251.4	5067.2	5512.1	5473.8	4187.3
52.5°	3854.8	3933.8	4304.5	4699.0	4969.2	5186.9	5512.1	5571.8	6165.0	6165.0	4804.2
55°	2912.7	2982.1	3405.4	4094.0	4727.7	5196.4	5703.3	5913.8	6636.0	6645.7	5127.0
57.5°	2360.2	2403.3	2611.4	3316.8	4220.7	5077.0	5930.6	6207.9	7028.2	7071.3	5543.3
60°	1915.5	1939.4	2075.8	2566.0	3520.1	4754.0	6093.3	6629.0	7587.9	7647.6	6074.1
62.5°	1540.1	1563.9	1654.9	1949.0	2762.0	4149.0	6064.5	7066.4	8333.9	8432.0	6769.9
65°	1229.2	1255.6	1315.3	1496.9	2047.0	3398.2	5770.4	7291.4	9106.4	9202.0	7231.4
67.5°	958.9	982.8	1023.4	1143.1	1442.0	2542.1	5074.4	7054.5	9453.0	9534.4	7255.4
70°	724.7	736.5	769.9	846.6	1030.6	1688.4	3972.0	6260.6	9142.2	9216.3	6777.2
72.5°	562.0	559.6	578.7	617.0	719.8	1162.1	2632.9	5091.2	8082.8	8159.3	5782.3
75°	459.2	456.8	468.7	480.7	521.3	779.5	1554.3	3833.3	6523.6	6377.7	4337.9
77.5°	387.3	385.1	397.1	399.3	416.1	538.1	884.8	2522.9	4352.3	4101.2	2444.0
80°	327.6	325.2	339.6	344.4	356.3	394.5	509.3	1365.5	2185.8	2071.0	1167.0
82.5°	246.3	255.8	282.2	294.1	308.5	291.8	315.7	602.7	1013.9	968.6	507.0
85°	119.6	141.2	212.8	236.8	253.5	184.2	215.2	284.6	456.8	435.1	205.6
87.5°	40.7	35.8	126.8	150.6	165.0	83.7	119.6	157.8	189.0	172.1	64.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P265572

CATALOG NUMBER: ARCH-L-AF72-90-D-U-T2R-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5
2.5°	1145.5	1109.5	1056.9	1016.3	990.0	968.6	958.9	956.5	951.8	949.4	949.4
5°	1169.4	1104.8	1023.4	980.5	968.6	958.9	963.7	966.0	966.0	966.0	966.0
7.5°	1205.3	1114.3	1016.3	987.6	985.3	985.3	999.6	1006.8	1011.5	1011.5	1011.5
10°	1253.0	1131.1	1028.3	1004.3	1011.5	1016.3	1033.1	1042.7	1047.5	1049.8	1052.3
12.5°	1317.6	1167.0	1052.3	1033.1	1042.7	1045.0	1056.9	1061.7	1066.6	1069.0	1069.0
15°	1403.7	1219.5	1090.5	1066.6	1069.0	1066.6	1066.6	1061.7	1059.5	1059.5	1064.1
17.5°	1492.3	1269.8	1124.0	1090.5	1080.9	1061.7	1047.5	1035.4	1028.3	1023.4	1026.0
20°	1580.7	1315.3	1143.1	1095.3	1069.0	1037.8	1011.5	994.9	985.3	975.6	980.5
22.5°	1669.2	1358.2	1150.3	1080.9	1042.7	997.2	968.6	942.2	920.7	906.3	908.7
25°	1767.2	1406.1	1150.3	1064.1	1006.8	958.9	923.1	880.0	849.0	837.0	841.7
27.5°	1865.3	1446.8	1138.3	1033.1	966.0	918.2	865.6	815.4	796.3	789.2	791.5
30°	1963.3	1477.9	1112.0	994.9	923.1	870.5	801.1	767.6	743.6	724.7	727.0
32.5°	2061.4	1499.5	1076.1	947.1	877.6	810.7	753.3	715.1	672.0	648.0	650.5
35°	2173.8	1516.1	1033.1	899.2	827.3	758.1	715.1	652.9	607.4	588.3	583.4
37.5°	2290.9	1528.0	987.6	846.6	777.3	719.8	676.8	600.2	557.2	530.9	528.6
40°	2417.7	1532.9	932.6	791.5	729.3	695.8	626.6	569.2	495.1	478.3	478.3
42.5°	2568.3	1530.5	877.6	736.5	676.8	640.9	590.6	564.3	499.7	483.1	473.4
45°	2740.5	1530.5	817.8	672.0	624.1	571.5	550.0	533.2	490.3	497.4	502.2
47.5°	2936.6	1525.7	746.1	619.4	581.2	535.7	523.7	487.8	471.2	475.9	480.7
50°	3206.8	1532.9	681.5	576.4	550.0	511.8	497.4	478.3	471.2	473.4	471.2
52.5°	3582.4	1509.0	619.4	550.0	526.0	475.9	475.9	473.4	475.9	473.4	473.4
55°	3788.0	1456.3	573.9	535.7	509.3	459.2	468.7	473.4	478.3	475.9	475.9
57.5°	4079.7	1420.5	538.1	526.0	499.7	454.4	464.0	473.4	475.9	473.4	473.4
60°	4424.1	1396.5	514.1	528.6	492.6	454.4	466.3	473.4	471.2	468.7	468.7
62.5°	4823.4	1387.1	497.4	535.7	485.4	456.8	466.3	473.4	464.0	461.5	461.5
65°	4974.1	1300.9	475.9	540.4	490.3	456.8	464.0	466.3	454.4	451.9	449.6
67.5°	4742.2	1152.6	444.8	530.9	504.6	456.8	456.8	454.4	440.0	437.7	432.9
70°	4223.1	956.5	397.1	499.7	514.1	459.2	447.1	435.1	420.9	420.9	411.3
72.5°	3457.9	753.3	334.8	444.8	507.0	466.3	428.0	411.3	394.5	394.5	385.1
75°	2491.8	562.0	267.9	370.7	475.9	464.0	404.1	382.6	363.5	361.1	349.1
77.5°	1420.5	394.5	217.6	289.3	423.3	451.9	382.6	349.1	327.6	320.4	313.2
80°	729.3	265.4	177.0	227.2	351.5	418.5	365.9	310.9	287.0	275.1	263.1
82.5°	346.7	177.0	136.4	167.4	265.4	365.9	344.4	267.9	241.6	227.2	212.8
85°	155.4	105.2	90.9	107.5	189.0	284.6	303.6	220.1	189.0	236.8	174.6
87.5°	50.2	47.8	47.8	50.2	90.9	124.3	222.4	162.7	150.6	124.3	105.2
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)