

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: P265959

Luminaire Tested: **ARCH-AF24-70-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265959
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-AF24-70-D-U-T2R-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 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: 7404.3 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

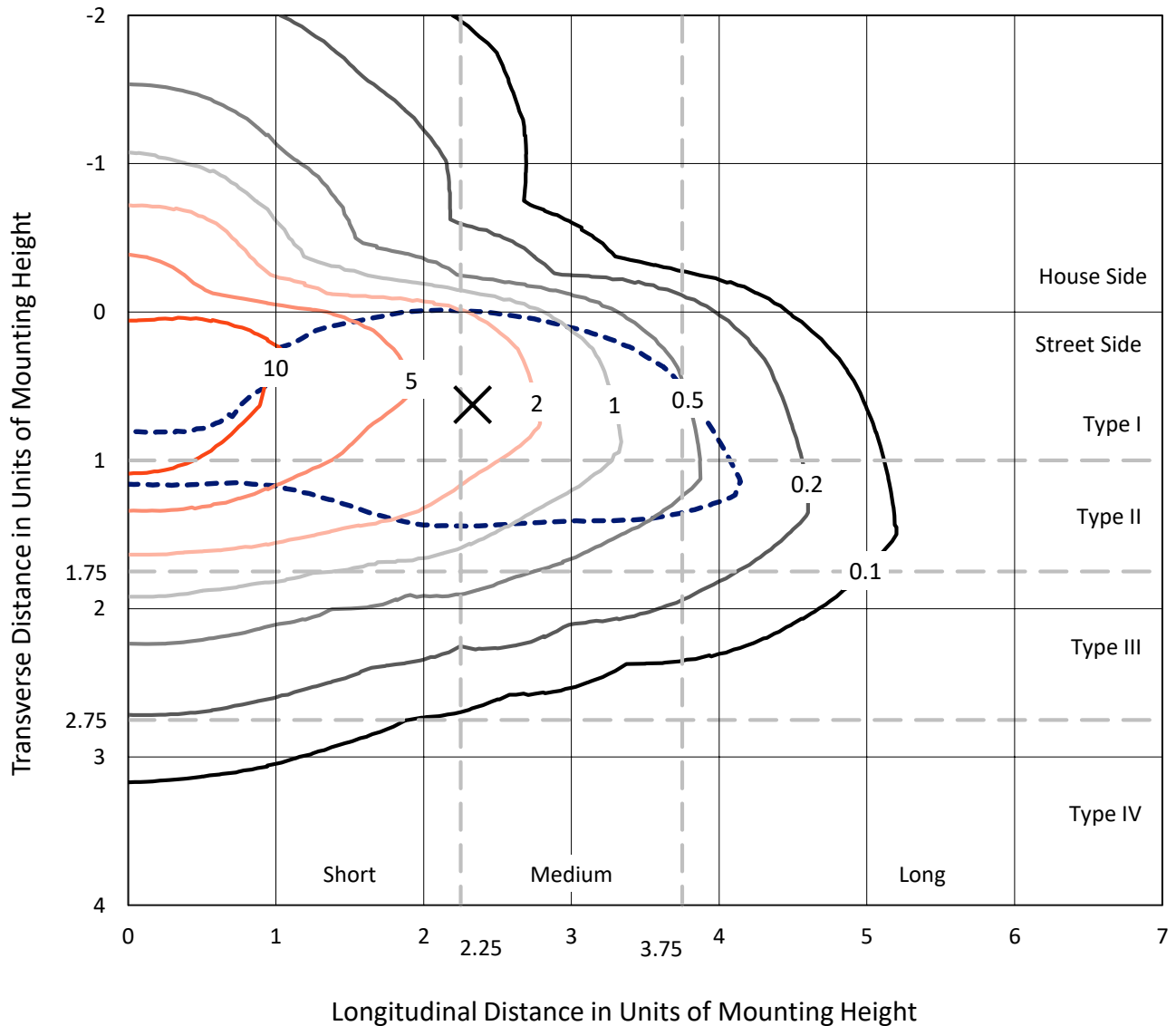
Input Watts (W): 74
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P265959
 CATALOG NUMBER: ARCH-AF24-70-D-U-T2R-7027

Iso-Footcandle Lines of Horizontal Illumination

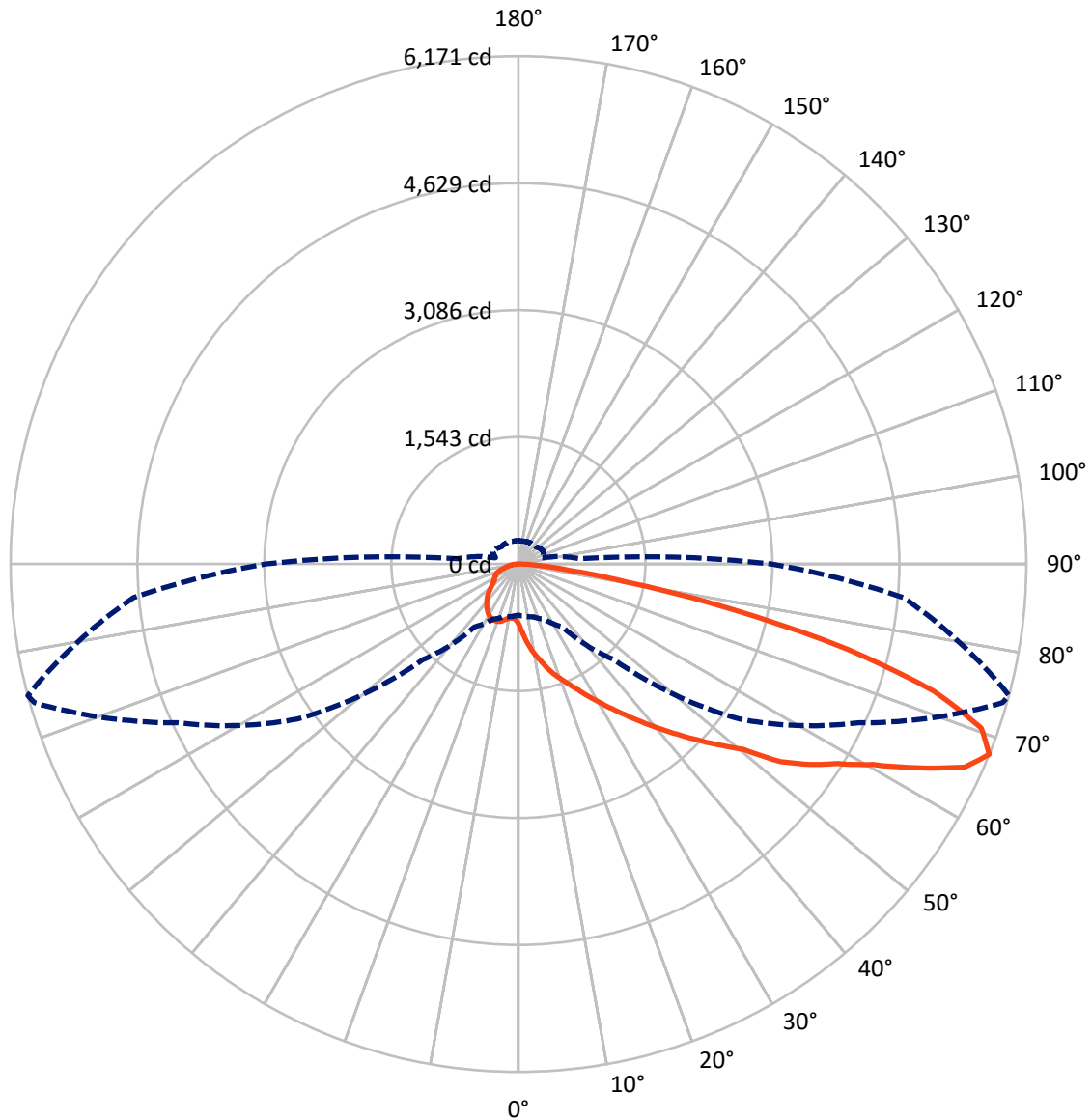
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.4 fc
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P265959
CATALOG NUMBER: ARCH-AF24-70-D-U-T2R-7027

Luminous Intensity Polar Plot



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



REPORT NUMBER: P265959

CATALOG NUMBER: ARCH-AF24-70-D-U-T2R-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1264.4	0.0	1264.4
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	6139.9	0.0	6139.9
	% Fixture	82.9	0.0	82.9
Total	Lumens	7404.3	0.0	7404.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.2	1.2
10°-20°	311.5	4.2
20°-30°	568.1	7.7
30°-40°	932.5	12.6
40°-50°	1348.6	18.2
50°-60°	1589.3	21.5
60°-70°	1544.4	20.9
70°-80°	858.5	11.6
80°-90°	165.1	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°	7404.3	100.0
0°-180°	7404.3	100.0



REPORT NUMBER: P265959

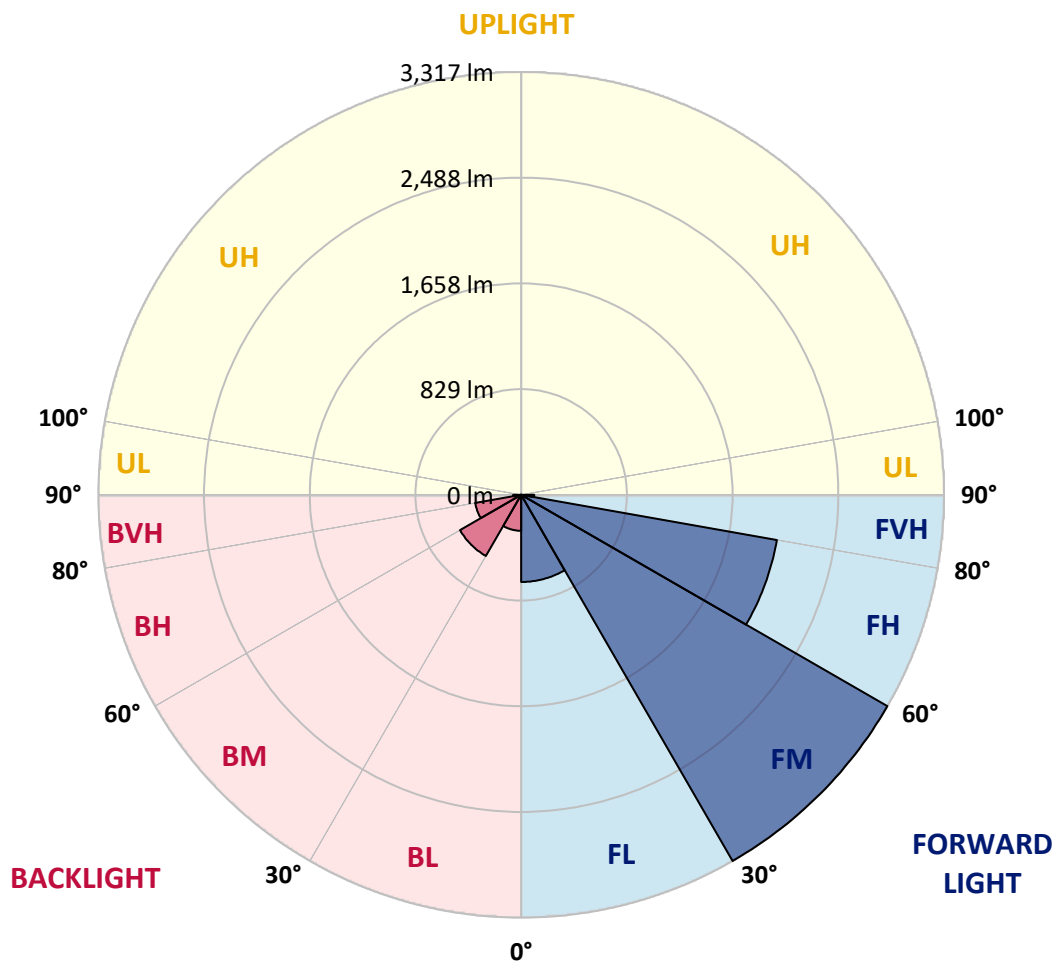
CATALOG NUMBER: ARCH-AF24-70-D-U-T2R-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	683.6	9.2			
FM (30°-60°)	3316.7	44.8			
FH (60°-80°)	2036.8	27.5			G2/5000
FVH (80°-90°)	102.7	1.4			G2/225
BL (0°-30°)	282.2	3.8	B1/500		
BM (30°-60°)	553.7	7.5	B1/1000		
BH (60°-80°)	366.1	4.9	B1/500		G1/500
BVH (80°-90°)	62.3	0.8			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium





REPORT NUMBER: P265959

CATALOG NUMBER: ARCH-AF24-70-D-U-T2R-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	733.6	733.6	733.6	733.6	733.6	733.6	733.6	733.6	733.6	733.6	733.6
2.5°	1040.1	1043.3	1037.1	1023.2	1003.0	965.9	933.3	876.0	825.1	818.9	764.6
5°	1222.9	1225.8	1218.2	1201.2	1179.5	1139.2	1094.3	1020.0	938.0	922.5	807.9
7.5°	1348.1	1349.8	1340.5	1323.5	1306.5	1266.3	1221.2	1137.8	1037.1	1024.6	863.7
10°	1455.1	1458.0	1445.7	1435.0	1416.3	1376.1	1329.6	1241.4	1137.8	1120.6	921.0
12.5°	1554.1	1557.1	1549.4	1540.1	1533.9	1496.8	1445.7	1340.5	1229.1	1210.5	989.2
15°	1620.6	1623.7	1625.3	1637.7	1645.3	1619.0	1568.0	1453.5	1328.1	1311.0	1069.6
17.5°	1602.0	1609.9	1632.9	1677.9	1725.9	1727.4	1685.6	1564.8	1425.6	1407.0	1151.5
20°	1547.9	1554.1	1581.9	1650.0	1744.5	1798.6	1795.5	1677.9	1516.9	1496.8	1227.4
22.5°	1592.8	1600.5	1600.5	1642.3	1735.2	1835.7	1876.0	1789.3	1608.2	1589.7	1303.4
25°	1784.8	1789.3	1756.8	1739.7	1773.9	1866.8	1942.6	1910.1	1719.6	1698.1	1385.4
27.5°	2052.4	2044.7	2004.5	1936.3	1899.2	1924.0	2001.5	2024.6	1848.2	1821.9	1470.4
30°	2318.7	2314.0	2267.6	2176.4	2092.7	2040.1	2066.5	2126.7	1987.5	1956.5	1552.5
32.5°	2568.0	2560.2	2509.1	2402.2	2307.8	2210.4	2159.3	2219.6	2136.1	2100.4	1643.9
35°	2797.1	2776.9	2725.7	2614.3	2516.8	2423.9	2298.7	2307.8	2297.1	2259.9	1744.5
37.5°	2982.7	2967.3	2911.5	2807.8	2704.2	2616.0	2484.4	2408.4	2470.3	2434.8	1860.6
40°	3146.9	3129.9	3072.6	2968.8	2872.9	2789.2	2685.6	2530.7	2665.5	2625.1	1990.6
42.5°	3270.6	3258.3	3211.8	3109.8	3016.8	2941.1	2889.8	2685.6	2868.2	2829.5	2132.9
45°	3337.3	3324.8	3300.1	3218.1	3132.8	3074.1	3078.8	2869.7	3080.3	3047.8	2301.6
47.5°	3255.2	3264.5	3286.1	3270.6	3218.1	3190.2	3247.5	3060.2	3317.1	3286.1	2484.4
50°	3035.5	3044.6	3131.3	3238.2	3256.7	3290.9	3399.1	3279.9	3567.9	3543.1	2710.4
52.5°	2495.2	2546.2	2786.2	3041.7	3216.6	3357.3	3567.9	3606.5	3990.5	3990.5	3109.8
55°	1885.4	1930.2	2204.3	2650.0	3060.2	3363.6	3691.7	3827.9	4295.3	4301.5	3318.7
57.5°	1527.7	1555.7	1690.3	2146.9	2731.9	3286.1	3838.7	4018.3	4549.1	4577.0	3588.0
60°	1239.8	1255.3	1343.5	1660.8	2278.6	3077.1	3944.0	4290.8	4911.5	4950.1	3931.6
62.5°	996.8	1012.3	1071.0	1261.5	1787.7	2685.6	3925.5	4574.0	5394.3	5457.8	4382.0
65°	795.5	812.6	851.4	969.0	1325.0	2199.5	3735.1	4719.4	5894.3	5956.2	4680.8
67.5°	620.6	636.2	662.5	739.8	933.3	1645.3	3284.7	4566.3	6118.7	6171.4	4696.2
70°	469.0	476.7	498.4	548.0	667.1	1092.8	2570.9	4052.3	5917.6	5965.6	4386.7
72.5°	363.8	362.1	374.7	399.3	466.0	752.3	1704.3	3295.4	5231.8	5281.3	3742.8
75°	297.2	295.6	303.4	311.2	337.5	504.6	1006.1	2481.3	4222.7	4128.3	2807.8
77.5°	250.7	249.2	256.9	258.5	269.3	348.3	572.7	1632.9	2817.2	2654.6	1581.9
80°	212.1	210.6	219.7	222.9	230.7	255.4	329.7	883.8	1414.8	1340.5	755.4
82.5°	159.4	165.6	182.6	190.4	199.7	188.9	204.4	390.0	656.3	626.8	328.2
85°	77.4	91.3	137.8	153.3	164.1	119.1	139.2	184.2	295.6	281.7	133.0
87.5°	26.3	23.3	82.0	97.6	106.8	54.2	77.4	102.1	122.3	111.4	41.9
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: P265959

CATALOG NUMBER: ARCH-AF24-70-D-U-T2R-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	733.6	733.6	733.6	733.6	733.6	733.6	733.6	733.6	733.6	733.6	733.6
2.5°	741.5	718.3	684.1	657.9	640.9	626.8	620.6	619.1	616.1	614.5	614.5
5°	756.9	715.1	662.5	634.7	626.8	620.6	623.9	625.3	625.3	625.3	625.3
7.5°	780.1	721.2	657.9	639.2	637.7	637.7	647.0	651.7	654.8	654.8	654.8
10°	811.1	732.2	665.6	650.2	654.8	657.9	668.7	674.8	678.0	679.5	681.0
12.5°	852.9	755.4	681.0	668.7	674.8	676.5	684.1	687.3	690.3	692.0	692.0
15°	908.5	789.4	705.8	690.3	692.0	690.3	690.3	687.3	685.6	685.6	688.8
17.5°	965.9	821.9	727.4	705.8	699.6	687.3	678.0	670.2	665.6	662.5	664.0
20°	1023.2	851.4	739.8	708.9	692.0	671.8	654.8	643.9	637.7	631.5	634.7
22.5°	1080.4	879.3	744.5	699.6	674.8	645.4	626.8	609.9	595.9	586.7	588.2
25°	1143.9	910.2	744.5	688.8	651.7	620.6	597.6	569.6	549.6	541.8	544.8
27.5°	1207.3	936.5	736.8	668.7	625.3	594.4	560.4	527.8	515.4	510.7	512.4
30°	1270.8	956.5	719.7	643.9	597.6	563.4	518.5	496.9	481.4	469.0	470.5
32.5°	1334.3	970.4	696.5	613.0	568.1	524.7	487.6	462.7	435.0	419.5	421.0
35°	1407.0	981.4	668.7	582.0	535.6	490.7	462.7	422.6	393.2	380.8	377.6
37.5°	1482.8	989.2	639.2	548.0	503.1	466.0	438.1	388.4	360.7	343.6	342.1
40°	1564.8	992.2	603.8	512.4	472.1	450.4	405.6	368.3	320.4	309.6	309.6
42.5°	1662.5	990.7	568.1	476.7	438.1	414.8	382.3	365.3	323.5	312.7	306.5
45°	1773.9	990.7	529.5	435.0	404.0	369.9	356.0	345.2	317.3	322.0	325.0
47.5°	1900.9	987.5	482.8	401.0	376.1	346.7	339.0	315.8	305.0	307.9	311.2
50°	2075.8	992.2	441.2	373.1	356.0	331.3	322.0	309.6	305.0	306.5	305.0
52.5°	2318.7	976.6	401.0	356.0	340.5	307.9	307.9	306.5	307.9	306.5	306.5
55°	2451.8	942.6	371.4	346.7	329.7	297.2	303.4	306.5	309.6	307.9	307.9
57.5°	2640.7	919.4	348.3	340.5	323.5	294.0	300.4	306.5	307.9	306.5	306.5
60°	2863.5	904.0	332.8	342.1	318.9	294.0	301.8	306.5	305.0	303.4	303.4
62.5°	3122.1	897.8	322.0	346.7	314.1	295.6	301.8	306.5	300.4	298.7	298.7
65°	3219.5	842.0	307.9	349.8	317.3	295.6	300.4	301.8	294.0	292.6	291.1
67.5°	3069.5	746.1	287.8	343.6	326.7	295.6	295.6	294.0	284.9	283.2	280.2
70°	2733.5	619.1	256.9	323.5	332.8	297.2	289.4	281.7	272.5	272.5	266.3
72.5°	2238.2	487.6	216.8	287.8	328.2	301.8	277.0	266.3	255.4	255.4	249.2
75°	1612.8	363.8	173.4	239.8	307.9	300.4	261.5	247.7	235.3	233.6	226.1
77.5°	919.4	255.4	140.9	187.2	274.0	292.6	247.7	226.1	212.1	207.4	202.7
80°	472.1	171.8	114.5	147.1	227.5	270.8	236.9	201.2	185.7	178.0	170.3
82.5°	224.4	114.5	88.3	108.3	171.8	236.9	222.9	173.4	156.3	147.1	137.8
85°	100.6	68.1	58.7	69.7	122.3	184.2	196.5	142.4	122.3	153.3	112.9
87.5°	32.5	30.9	30.9	32.5	58.7	80.5	144.0	105.2	97.6	80.5	68.1
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)