

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: P214743

Luminaire Tested: **ARCH-AF24-40-D-U-T3-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214743
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-AF24-40-D-U-T3-7050
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5135 lumens
Efficiency: N/A
Efficacy: 128.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

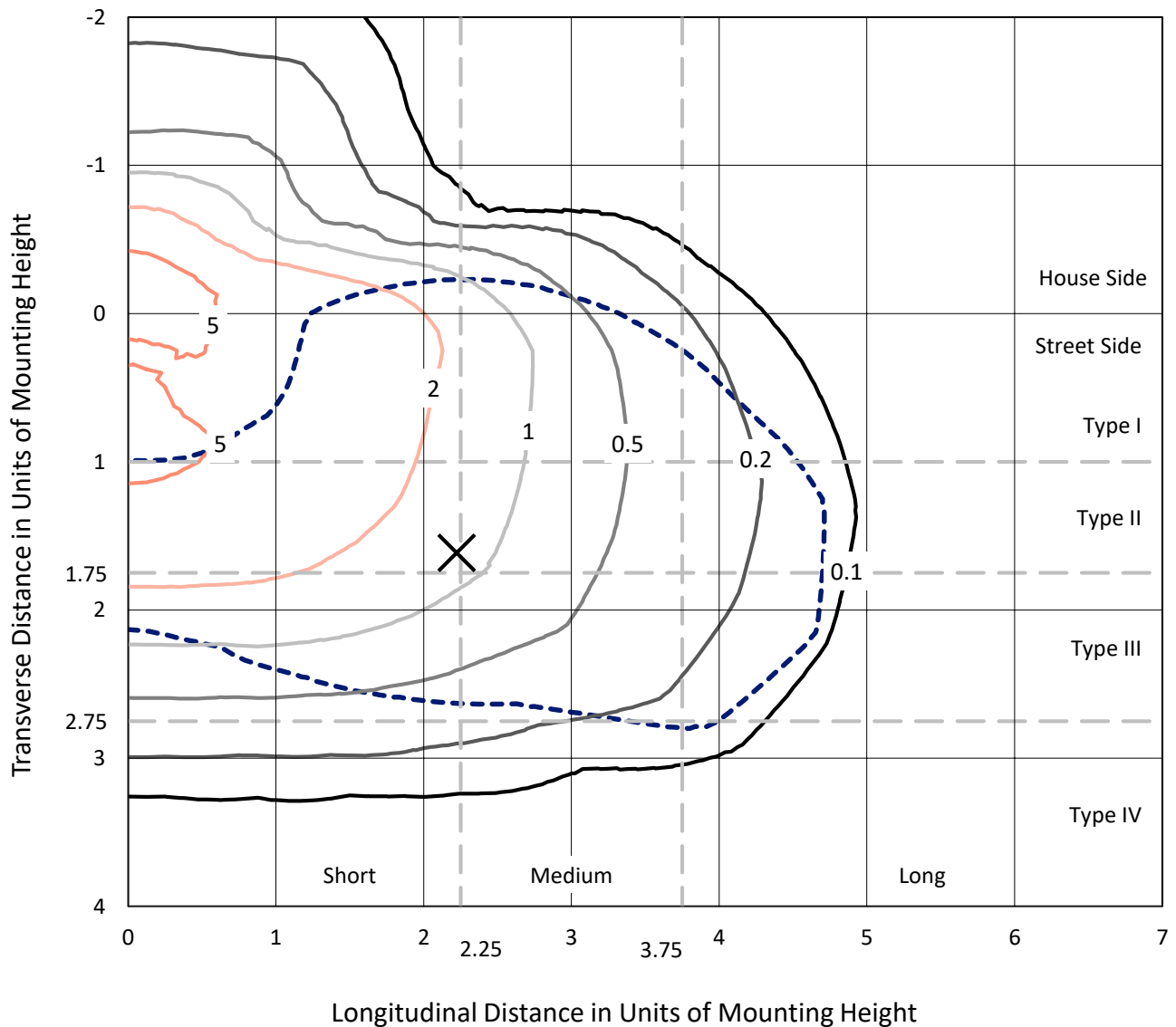
Input Watts (W): 40
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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 CATALOG NUMBER: ARCH-AF24-40-D-U-T3-7050

Iso-Footcandle Lines of Horizontal Illumination

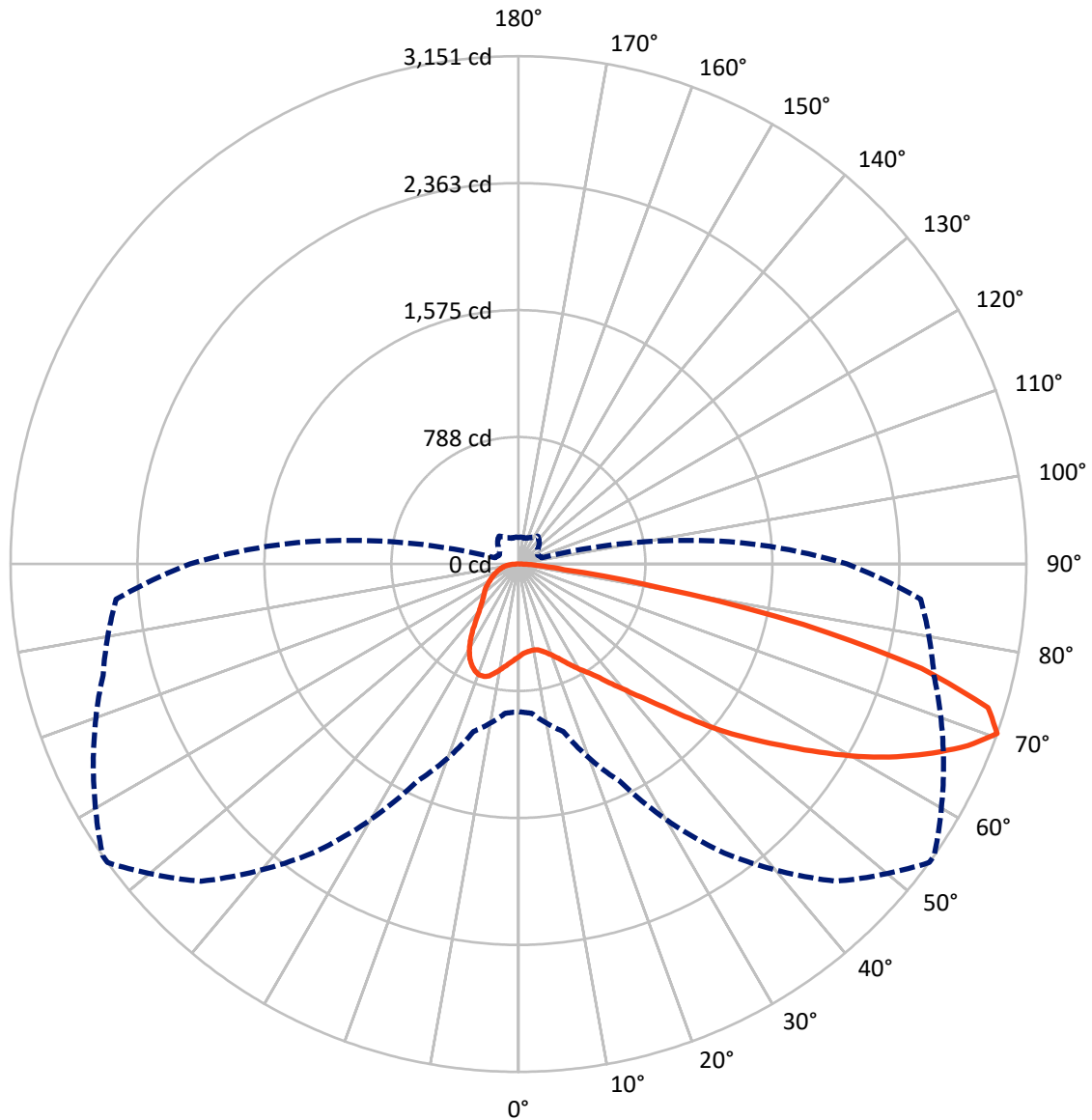
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.7 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P214743
CATALOG NUMBER: ARCH-AF24-40-D-U-T3-7050

Luminous Intensity Polar Plot



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



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CATALOG NUMBER: ARCH-AF24-40-D-U-T3-7050

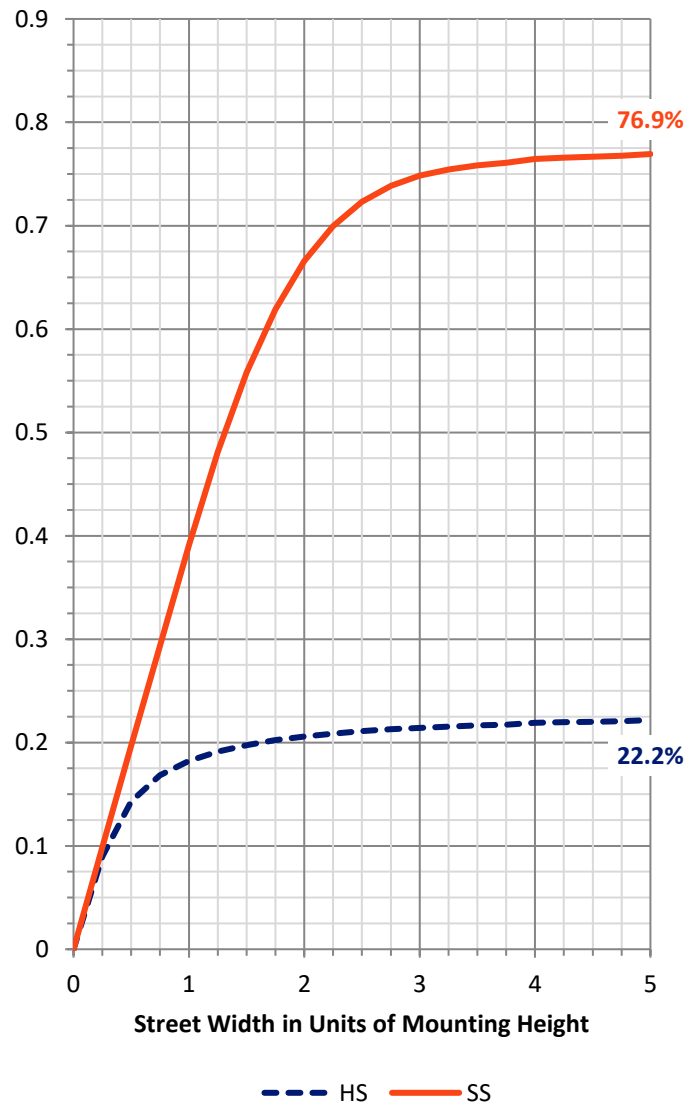
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1164.6	0.0	1164.6
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	3970.4	0.0	3970.4
	% Fixture	77.3	0.0	77.3
Total	Lumens	5135.0	0.0	5135.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.4	1.1
10°-20°	180.1	3.5
20°-30°	313.0	6.1
30°-40°	457.4	8.9
40°-50°	717.9	14.0
50°-60°	1103.9	21.5
60°-70°	1348.7	26.3
70°-80°	836.2	16.3
80°-90°	121.5	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°	5135.0	100.0
0°-180°	5135.0	100.0

Coefficient of Utilization



REPORT NUMBER: P214743

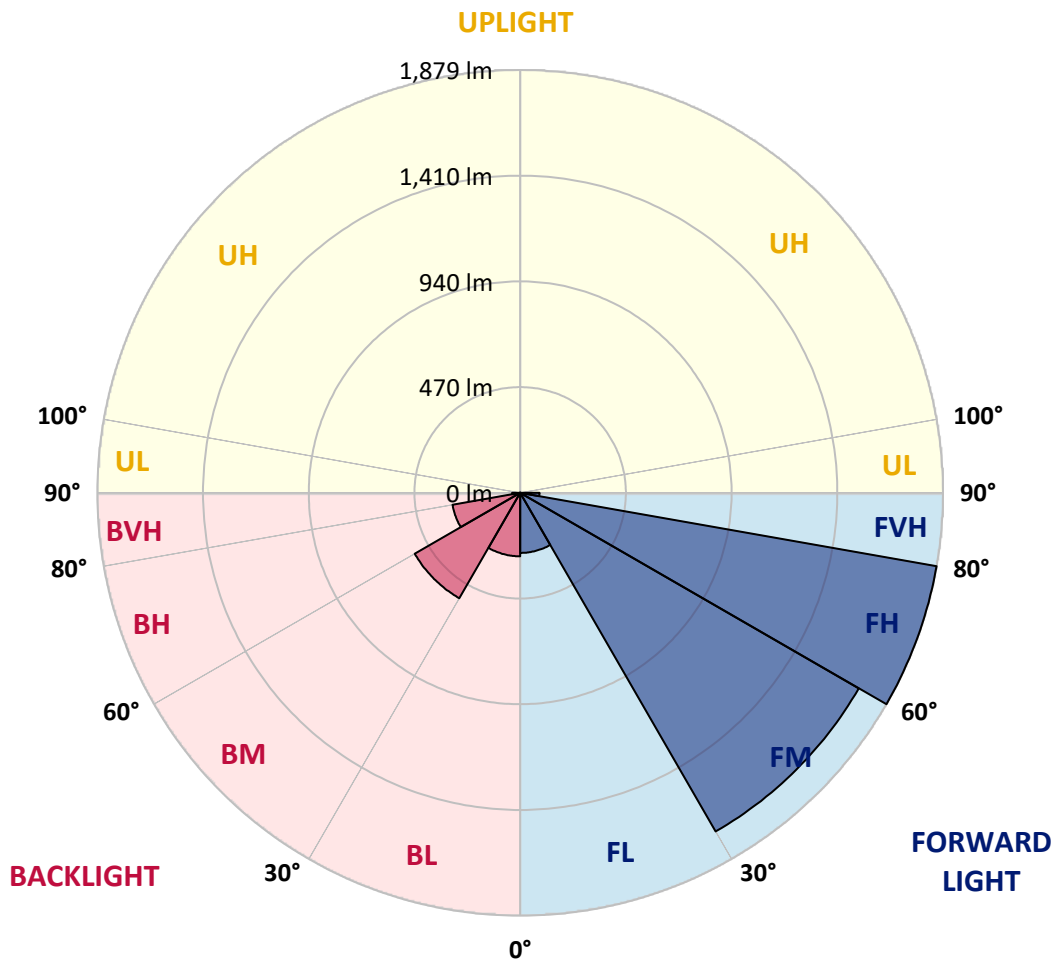
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	267.2	5.2			
FM	(30°-60°)	1738.0	33.8			
FH	(60°-80°)	1879.5	36.6			G2/5000
FVH	(80°-90°)	85.8	1.7			G1/100
BL	(0°-30°)	282.3	5.5	B1/500		
BM	(30°-60°)	541.2	10.5	B1/1000		
BH	(60°-80°)	305.4	5.9	B1/500		G1/500
BVH	(80°-90°)	35.7	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





REPORT NUMBER: P214743

CATALOG NUMBER: ARCH-AF24-40-D-U-T3-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	574.5	574.5	574.5	574.5	574.5	574.5	574.5	574.5	574.5	574.5	574.5
2.5°	551.9	550.1	550.1	552.9	553.8	556.6	556.6	557.6	560.4	565.1	570.7
5°	535.0	534.1	535.0	538.8	540.7	546.3	548.2	549.1	554.8	562.3	570.7
7.5°	518.1	517.1	519.0	524.7	530.3	538.8	543.5	544.4	552.9	563.2	574.5
10°	512.4	511.5	514.3	519.0	524.7	534.1	541.6	542.5	554.8	567.0	583.0
12.5°	520.0	519.0	521.8	526.5	532.2	538.8	547.2	548.2	564.2	580.1	597.1
15°	538.8	538.8	539.7	542.5	548.2	553.8	561.3	562.3	579.2	598.0	614.9
17.5°	567.9	566.0	566.0	565.1	568.9	571.7	581.1	582.0	599.9	616.8	633.7
20°	603.7	602.7	598.9	594.2	593.3	595.2	604.6	605.5	623.4	637.5	653.5
22.5°	646.9	647.8	639.4	629.0	624.3	627.2	635.6	636.6	649.7	661.9	676.1
25°	704.3	701.4	689.2	674.2	664.8	664.8	673.2	673.2	685.5	693.0	702.4
27.5°	758.8	753.2	741.9	720.2	705.2	708.0	716.5	716.5	727.8	730.6	735.3
30°	818.0	812.4	798.3	771.0	751.3	749.4	759.7	758.8	773.8	772.9	769.1
32.5°	890.4	887.6	864.1	829.3	803.0	796.4	805.8	806.7	816.2	813.3	801.1
35°	992.0	991.0	969.4	908.3	873.5	861.3	866.9	866.9	873.5	866.0	845.3
37.5°	1119.9	1121.7	1102.9	1012.7	963.8	943.1	944.0	943.1	945.0	936.5	914.9
40°	1247.7	1252.4	1251.5	1142.4	1080.4	1044.6	1031.5	1029.6	1034.3	1030.5	1009.8
42.5°	1416.0	1427.3	1401.0	1302.3	1232.7	1172.5	1136.8	1132.1	1142.4	1147.1	1127.4
45°	1590.9	1587.2	1545.8	1474.3	1411.3	1334.2	1266.5	1259.0	1266.5	1280.6	1260.0
47.5°	1682.1	1679.3	1669.0	1633.2	1623.8	1535.5	1433.0	1426.4	1412.3	1432.0	1407.6
50°	1832.6	1835.4	1793.1	1789.3	1828.8	1779.9	1621.0	1606.0	1580.6	1596.6	1575.9
52.5°	1941.7	1929.4	1903.1	1936.0	2059.2	2032.9	1797.8	1791.2	1767.7	1763.9	1754.5
55°	1985.8	1985.8	1990.5	2066.7	2242.5	2207.7	1989.6	1996.2	1964.2	1937.9	1950.1
57.5°	1999.0	2004.6	2045.1	2171.1	2457.9	2344.1	2201.2	2210.6	2164.5	2111.8	2150.4
60°	1934.1	1951.1	2047.9	2230.3	2579.2	2488.9	2424.0	2426.8	2360.1	2283.0	2350.7
62.5°	1767.7	1788.4	1961.4	2254.8	2559.4	2637.4	2634.6	2641.2	2550.0	2454.1	2538.7
65°	1563.7	1584.3	1768.6	2186.1	2544.4	2743.7	2827.4	2845.2	2727.7	2598.9	2656.3
67.5°	1263.7	1291.0	1465.9	1954.8	2471.0	2831.1	3007.9	3026.7	2865.0	2674.1	2645.9
70°	915.8	929.0	1075.7	1485.6	2172.0	2783.2	3150.8	3149.9	2910.1	2668.5	2504.9
72.5°	441.0	451.3	578.3	922.4	1553.3	2361.9	3047.4	3065.3	2848.1	2586.7	2182.4
75°	181.5	191.8	234.1	389.3	815.2	1560.8	2582.9	2625.2	2586.7	2321.5	1707.5
77.5°	112.8	116.6	137.3	201.2	372.3	728.7	1808.1	1865.5	2049.8	1859.8	1127.4
80°	84.6	87.4	102.5	141.0	235.1	268.9	898.0	970.4	1242.1	1067.2	510.6
82.5°	70.5	71.5	81.8	102.5	159.8	154.2	287.7	320.6	579.2	407.1	175.8
85°	65.8	67.7	73.3	73.3	101.5	96.8	119.4	125.1	168.3	139.2	61.1
87.5°	33.8	32.0	64.9	57.4	52.7	47.0	50.8	54.5	63.0	66.8	27.3
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: P214743

CATALOG NUMBER: ARCH-AF24-40-D-U-T3-7050

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	574.5	574.5	574.5	574.5	574.5	574.5	574.5	574.5	574.5	574.5	574.5
2.5°	572.6	575.4	580.1	584.8	590.5	597.1	600.8	605.5	609.3	607.4	606.5
5°	575.4	580.1	590.5	599.9	611.2	624.3	632.8	642.2	649.7	651.6	648.8
7.5°	580.1	588.6	602.7	619.6	634.7	651.6	664.8	677.9	687.3	689.2	689.2
10°	591.4	600.8	619.6	642.2	660.1	677.9	693.0	703.3	711.8	715.5	715.5
12.5°	607.4	618.7	641.3	668.5	688.3	705.2	713.7	718.4	722.1	725.9	726.8
15°	626.2	638.4	665.7	694.9	715.5	724.0	724.0	723.1	723.1	724.9	726.8
17.5°	645.0	658.2	686.4	717.4	730.6	725.9	719.3	716.5	714.6	713.7	716.5
20°	664.8	677.9	706.1	735.3	731.5	711.8	702.4	695.8	690.2	687.3	691.1
22.5°	686.4	698.6	727.8	747.5	719.3	689.2	671.4	661.0	651.6	646.0	649.7
25°	711.8	724.0	752.2	751.3	697.7	655.4	627.2	610.2	599.9	594.2	594.2
27.5°	741.9	752.2	779.5	741.9	667.6	610.2	568.9	552.9	550.1	545.4	545.4
30°	772.9	781.4	804.9	720.2	626.2	551.0	505.9	498.3	499.3	494.6	495.5
32.5°	804.9	813.3	819.9	688.3	572.6	484.2	454.1	448.5	447.6	443.8	440.0
35°	850.0	862.2	821.8	645.0	507.7	428.8	407.1	401.5	395.9	382.7	382.7
37.5°	918.6	931.8	817.1	591.4	441.0	385.5	365.8	358.2	348.8	335.7	331.0
40°	1012.7	1012.7	806.7	531.3	387.4	350.7	331.9	322.5	312.2	299.0	296.2
42.5°	1123.6	1097.3	790.8	470.1	347.9	327.2	310.3	299.9	287.7	272.7	270.8
45°	1253.4	1181.9	768.2	415.6	318.8	313.1	302.8	284.9	264.2	248.2	245.4
47.5°	1379.4	1258.1	746.6	377.0	294.3	307.5	299.0	268.9	240.7	218.1	215.3
50°	1517.6	1325.8	721.2	345.1	275.5	303.7	294.3	245.4	214.4	198.4	196.5
52.5°	1655.8	1394.4	693.9	311.2	259.5	296.2	283.0	228.5	213.4	191.8	189.0
55°	1801.6	1474.3	661.9	273.6	240.7	281.1	268.0	227.5	220.0	191.8	185.2
57.5°	1943.5	1562.7	610.2	236.9	220.0	258.6	262.3	221.9	205.9	189.9	182.4
60°	2100.6	1656.7	524.7	205.9	202.2	239.8	254.8	209.7	189.9	184.3	180.5
62.5°	2226.6	1741.4	410.0	184.3	187.1	224.7	245.4	202.2	183.4	178.7	177.7
65°	2281.1	1743.3	294.3	165.5	172.1	210.6	236.0	195.6	177.7	175.8	174.9
67.5°	2223.7	1647.3	206.9	147.6	156.1	197.5	223.8	189.0	172.1	173.0	171.1
70°	2038.5	1445.2	151.4	130.7	141.0	183.4	210.6	180.5	165.5	167.4	164.5
72.5°	1705.6	1126.4	121.3	116.6	128.8	168.3	197.5	171.1	155.1	156.1	150.4
75°	1260.0	746.6	101.5	104.4	114.7	154.2	180.5	158.9	143.9	140.1	136.3
77.5°	749.4	383.6	83.7	91.2	102.5	137.3	161.7	143.9	131.6	125.1	122.2
80°	309.3	155.1	68.6	77.1	89.3	122.2	142.9	126.0	117.5	111.0	107.2
82.5°	123.2	76.2	54.5	63.0	75.2	106.3	125.1	111.0	102.5	97.8	87.4
85°	47.0	37.6	36.7	44.2	56.4	81.8	103.4	93.1	86.5	74.3	71.5
87.5°	18.8	16.9	16.9	21.6	32.0	51.7	74.3	64.9	67.7	53.6	54.5
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)