

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: P214583

Luminaire Tested: **ARCH-AF16-30-D-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214583
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-AF16-30-D-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3890.3 lumens
Efficiency: N/A
Efficacy: 121.6 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 - G1

Input Watts (W): 32
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

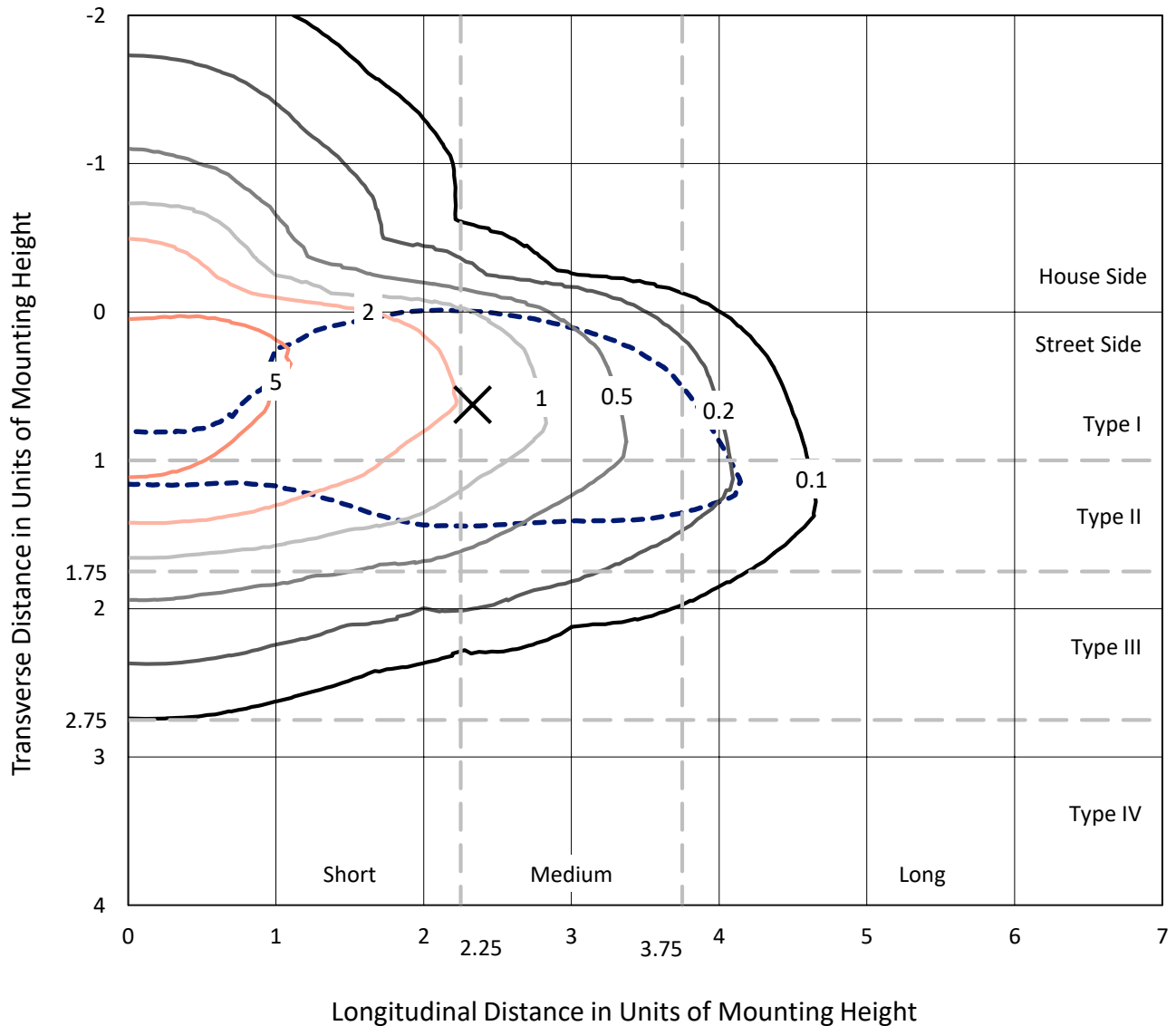


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

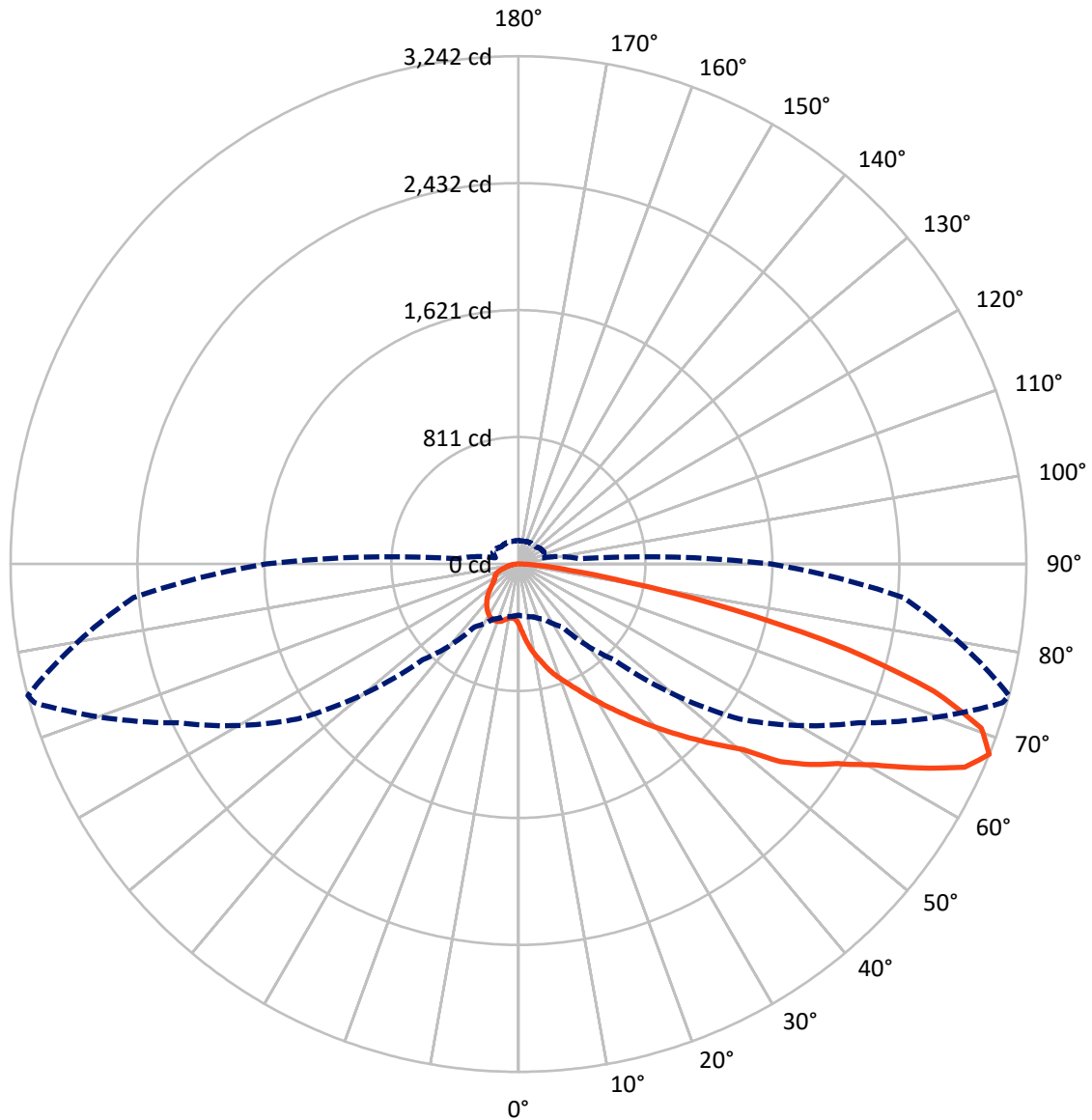


Based on 10 foot mounting height. Maximum calculated value = 8.1 fc
 Type II - Medium - Semi-Cutoff

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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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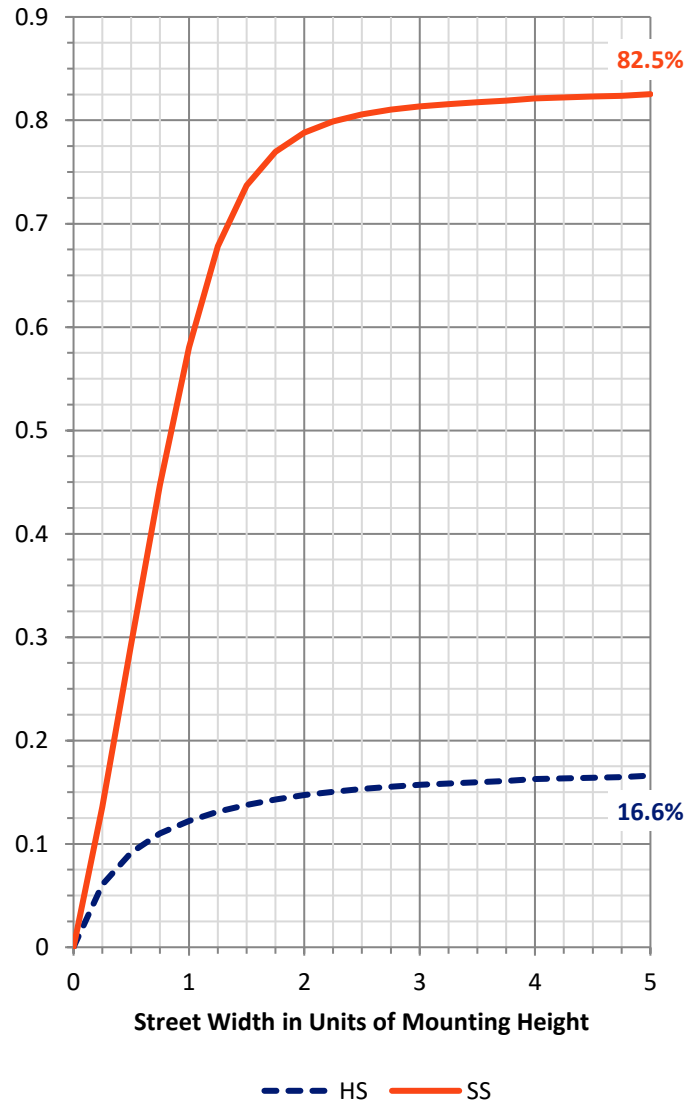
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	664.3	0.0	664.3
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	3226.0	0.0	3226.0
	% Fixture	82.9	0.0	82.9
Total	Lumens	3890.3	0.0	3890.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.3	1.2
10°-20°	163.7	4.2
20°-30°	298.5	7.7
30°-40°	490.0	12.6
40°-50°	708.6	18.2
50°-60°	835.0	21.5
60°-70°	811.5	20.9
70°-80°	451.1	11.6
80°-90°	86.7	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°	3890.3	100.0
0°-180°	3890.3	100.0

Coefficient of Utilization



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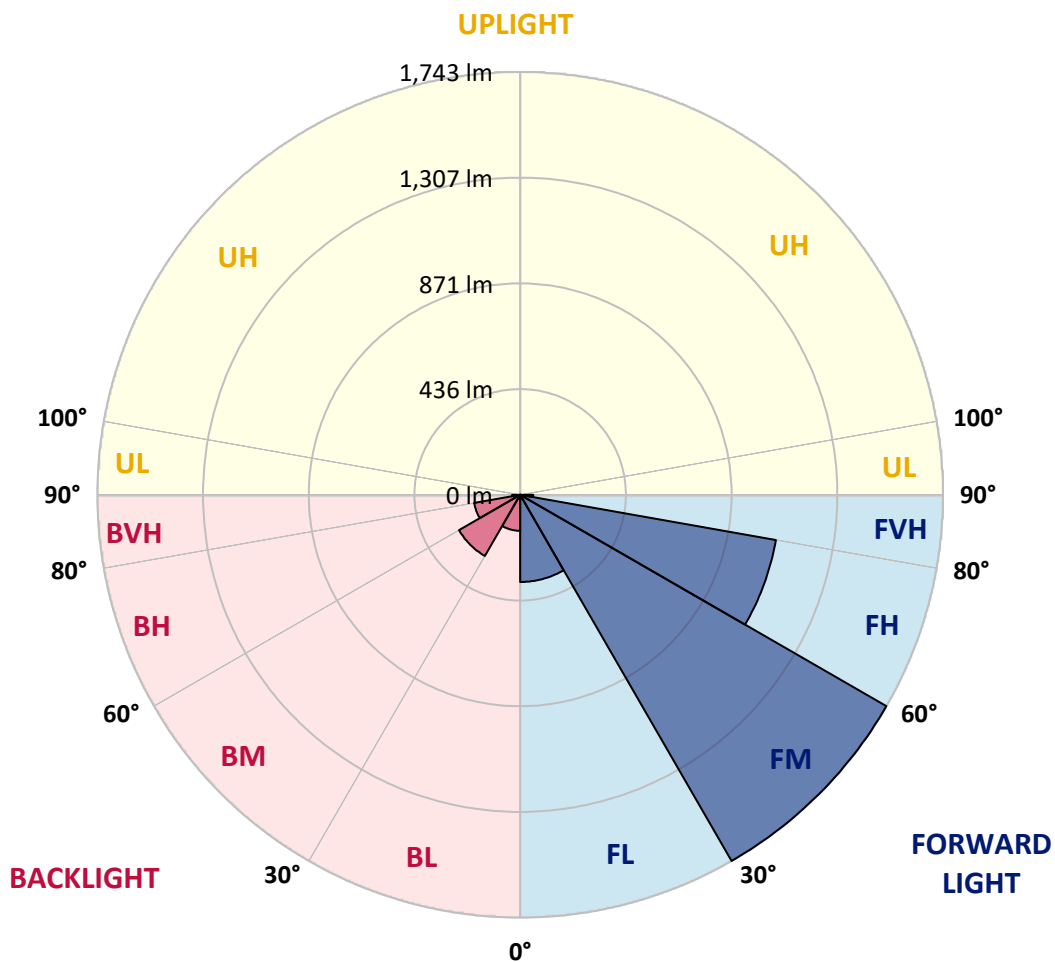
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	359.2	9.2			
FM	(30°-60°)	1742.6	44.8			
FH	(60°-80°)	1070.2	27.5			G1/1800
FVH	(80°-90°)	54.0	1.4			G1/100
BL	(0°-30°)	148.3	3.8	B1/500		
BM	(30°-60°)	290.9	7.5	B1/1000		
BH	(60°-80°)	192.3	4.9	B1/500		G1/500
BVH	(80°-90°)	32.7	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-G1

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	385.4	385.4	385.4	385.4	385.4	385.4	385.4	385.4	385.4	385.4	385.4
2.5°	546.6	548.1	544.9	537.6	527.0	507.5	490.4	460.3	433.4	430.3	401.7
5°	642.5	644.2	640.1	631.1	619.7	598.5	575.0	535.9	492.9	484.7	424.5
7.5°	708.4	709.2	704.3	695.3	686.4	665.2	641.7	597.7	544.9	538.4	453.8
10°	764.5	766.1	759.5	753.9	744.1	723.0	698.6	652.2	597.7	588.8	483.9
12.5°	816.5	818.2	814.1	809.2	806.0	786.4	759.5	704.3	645.7	636.0	519.7
15°	851.5	853.1	854.0	860.4	864.5	850.7	823.9	763.6	697.8	688.9	562.0
17.5°	841.7	845.8	857.9	881.6	906.7	907.6	885.7	822.2	749.0	739.3	605.1
20°	813.2	816.5	831.1	867.0	916.6	945.0	943.4	881.6	797.0	786.4	645.0
22.5°	836.9	841.0	841.0	862.9	911.7	964.5	985.7	940.1	845.0	835.2	684.8
25°	937.7	940.1	923.0	914.1	932.0	980.8	1020.7	1003.6	903.6	892.1	727.8
27.5°	1078.4	1074.3	1053.2	1017.4	997.9	1010.9	1051.6	1063.8	971.1	957.2	772.6
30°	1218.2	1215.9	1191.4	1143.5	1099.6	1071.8	1085.8	1117.5	1044.2	1028.0	815.7
32.5°	1349.2	1345.2	1318.3	1262.2	1212.6	1161.4	1134.6	1166.3	1122.3	1103.6	863.7
35°	1469.6	1459.0	1432.1	1373.6	1322.4	1273.6	1207.7	1212.6	1206.9	1187.3	916.6
37.5°	1567.2	1559.1	1529.7	1475.3	1420.8	1374.4	1305.3	1265.5	1298.0	1279.3	977.5
40°	1653.4	1644.4	1614.3	1559.9	1509.5	1465.5	1411.1	1329.7	1400.4	1379.3	1045.9
42.5°	1718.5	1711.9	1687.6	1633.9	1585.1	1545.2	1518.4	1411.1	1507.0	1486.7	1120.6
45°	1753.4	1746.9	1733.9	1690.7	1646.0	1615.1	1617.6	1507.8	1618.4	1601.3	1209.3
47.5°	1710.3	1715.2	1726.5	1718.5	1690.7	1676.1	1706.3	1607.9	1742.8	1726.5	1305.3
50°	1594.8	1599.7	1645.2	1701.4	1711.1	1729.0	1786.0	1723.3	1874.6	1861.6	1424.0
52.5°	1311.0	1337.8	1463.8	1598.1	1690.0	1764.0	1874.6	1894.9	2096.6	2096.6	1633.9
55°	990.5	1014.2	1158.1	1392.3	1607.9	1767.2	1939.6	2011.2	2256.8	2260.1	1743.6
57.5°	802.7	817.3	888.1	1128.0	1435.4	1726.5	2017.0	2111.3	2390.2	2404.9	1885.2
60°	651.4	659.6	705.9	872.7	1197.2	1616.8	2072.2	2254.4	2580.5	2600.9	2065.7
62.5°	523.8	531.8	562.8	662.8	939.3	1411.1	2062.5	2403.2	2834.2	2867.5	2302.4
65°	418.0	427.0	447.3	509.1	696.1	1155.6	1962.4	2479.6	3096.9	3129.4	2459.3
67.5°	326.1	334.3	348.1	388.7	490.4	864.5	1725.7	2399.1	3214.8	3242.4	2467.5
70°	246.4	250.5	261.9	287.9	350.6	574.2	1350.8	2129.2	3109.2	3134.3	2304.8
72.5°	191.1	190.3	196.8	209.8	244.8	395.3	895.4	1731.4	2748.9	2774.9	1966.5
75°	156.1	155.3	159.4	163.5	177.3	265.1	528.7	1303.6	2218.6	2169.0	1475.3
77.5°	131.8	130.9	135.0	135.8	141.5	183.0	301.0	857.9	1480.1	1394.8	831.1
80°	111.4	110.6	115.5	117.1	121.2	134.2	173.2	464.4	743.3	704.3	396.9
82.5°	83.8	87.1	96.0	100.0	105.0	99.2	107.3	204.9	344.8	329.4	172.4
85°	40.7	48.0	72.4	80.5	86.2	62.6	73.2	96.8	155.3	148.0	70.0
87.5°	13.8	12.2	43.1	51.2	56.2	28.4	40.7	53.7	64.2	58.5	22.0
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°	385.4	385.4	385.4	385.4	385.4	385.4	385.4	385.4	385.4	385.4	385.4
2.5°	389.5	377.4	359.5	345.7	336.7	329.4	326.1	325.3	323.7	322.8	322.8
5°	397.7	375.7	348.1	333.5	329.4	326.1	327.8	328.6	328.6	328.6	328.6
7.5°	409.9	379.0	345.7	335.8	335.0	335.0	339.9	342.4	344.0	344.0	344.0
10°	426.2	384.6	349.7	341.6	344.0	345.7	351.3	354.6	356.2	357.0	357.8
12.5°	448.2	396.9	357.8	351.3	354.6	355.4	359.5	361.1	362.7	363.6	363.6
15°	477.4	414.8	370.8	362.7	363.6	362.7	362.7	361.1	360.3	360.3	361.9
17.5°	507.5	431.9	382.3	370.8	367.5	361.1	356.2	352.1	349.7	348.1	348.9
20°	537.6	447.3	388.7	372.5	363.6	352.9	344.0	338.3	335.0	331.8	333.5
22.5°	567.6	462.0	391.2	367.5	354.6	339.1	329.4	320.4	313.1	308.2	309.0
25°	601.0	478.2	391.2	361.9	342.4	326.1	313.9	299.3	288.7	284.7	286.2
27.5°	634.3	492.0	387.1	351.3	328.6	312.3	294.4	277.3	270.8	268.4	269.2
30°	667.7	502.6	378.2	338.3	313.9	296.0	272.4	261.1	253.0	246.4	247.2
32.5°	701.0	509.9	366.0	322.0	298.5	275.7	256.1	243.2	228.5	220.4	221.2
35°	739.3	515.6	351.3	305.8	281.4	257.8	243.2	222.0	206.5	200.1	198.5
37.5°	779.1	519.7	335.8	287.9	264.3	244.8	230.2	204.2	189.5	180.6	179.7
40°	822.2	521.3	317.2	269.2	248.1	236.7	213.1	193.5	168.4	162.6	162.6
42.5°	873.5	520.5	298.5	250.5	230.2	218.0	200.9	191.9	170.0	164.3	161.0
45°	932.0	520.5	278.1	228.5	212.3	194.4	187.1	181.4	166.7	169.2	170.8
47.5°	998.7	518.8	253.7	210.6	197.6	182.2	178.1	165.9	160.2	161.8	163.5
50°	1090.6	521.3	231.8	196.0	187.1	174.0	169.2	162.6	160.2	161.0	160.2
52.5°	1218.2	513.2	210.6	187.1	178.9	161.8	161.8	161.0	161.8	161.0	161.0
55°	1288.2	495.3	195.2	182.2	173.2	156.1	159.4	161.0	162.6	161.8	161.8
57.5°	1387.4	483.0	183.0	178.9	170.0	154.6	157.7	161.0	161.8	161.0	161.0
60°	1504.6	475.0	174.8	179.7	167.6	154.6	158.6	161.0	160.2	159.4	159.4
62.5°	1640.4	471.7	169.2	182.2	165.1	155.3	158.6	161.0	157.7	156.9	156.9
65°	1691.6	442.4	161.8	183.8	166.7	155.3	157.7	158.6	154.6	153.7	152.9
67.5°	1612.7	392.0	151.3	180.6	171.5	155.3	155.3	154.6	149.7	148.8	147.2
70°	1436.2	325.3	135.0	170.0	174.8	156.1	152.1	148.0	143.1	143.1	139.8
72.5°	1176.0	256.1	113.9	151.3	172.4	158.6	145.6	139.8	134.2	134.2	130.9
75°	847.4	191.1	91.0	126.0	161.8	157.7	137.5	130.1	123.6	122.8	118.8
77.5°	483.0	134.2	74.0	98.4	143.9	153.7	130.1	118.8	111.4	108.9	106.5
80°	248.1	90.2	60.1	77.2	119.6	142.3	124.4	105.8	97.6	93.5	89.5
82.5°	117.9	60.1	46.3	57.0	90.2	124.4	117.1	91.0	82.1	77.2	72.4
85°	52.9	35.8	30.9	36.6	64.2	96.8	103.3	74.8	64.2	80.5	59.3
87.5°	17.1	16.3	16.3	17.1	30.9	42.2	75.6	55.3	51.2	42.2	35.8
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)