

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: P214723

Luminaire Tested: **ARCH-AF16-30-D-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214723
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-AF16-30-D-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3871.9 lumens
Efficiency: N/A
Efficacy: 121.0 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 - G1

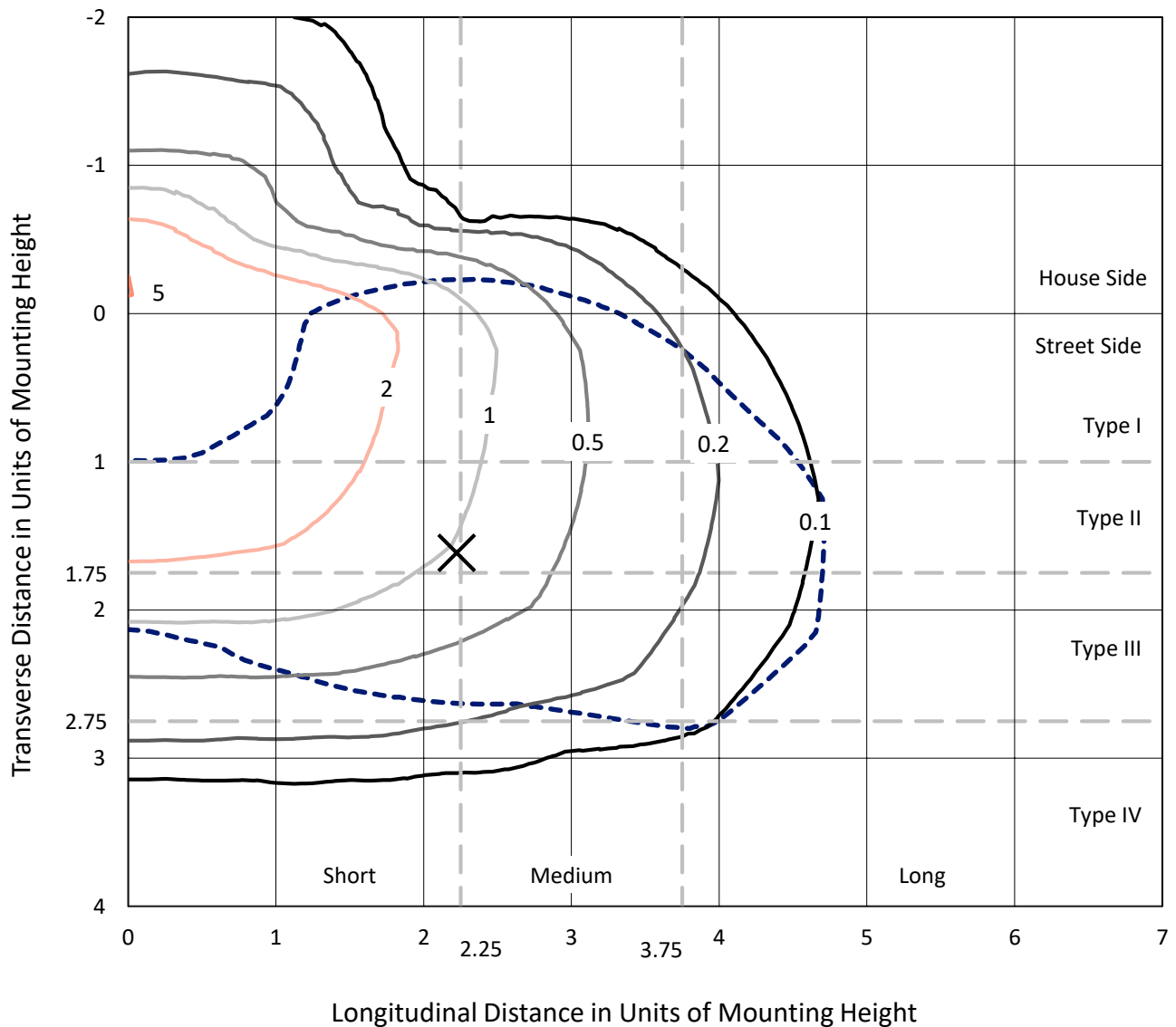
Input Watts (W): 32
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P214723
 CATALOG NUMBER: ARCH-AF16-30-D-U-T3

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

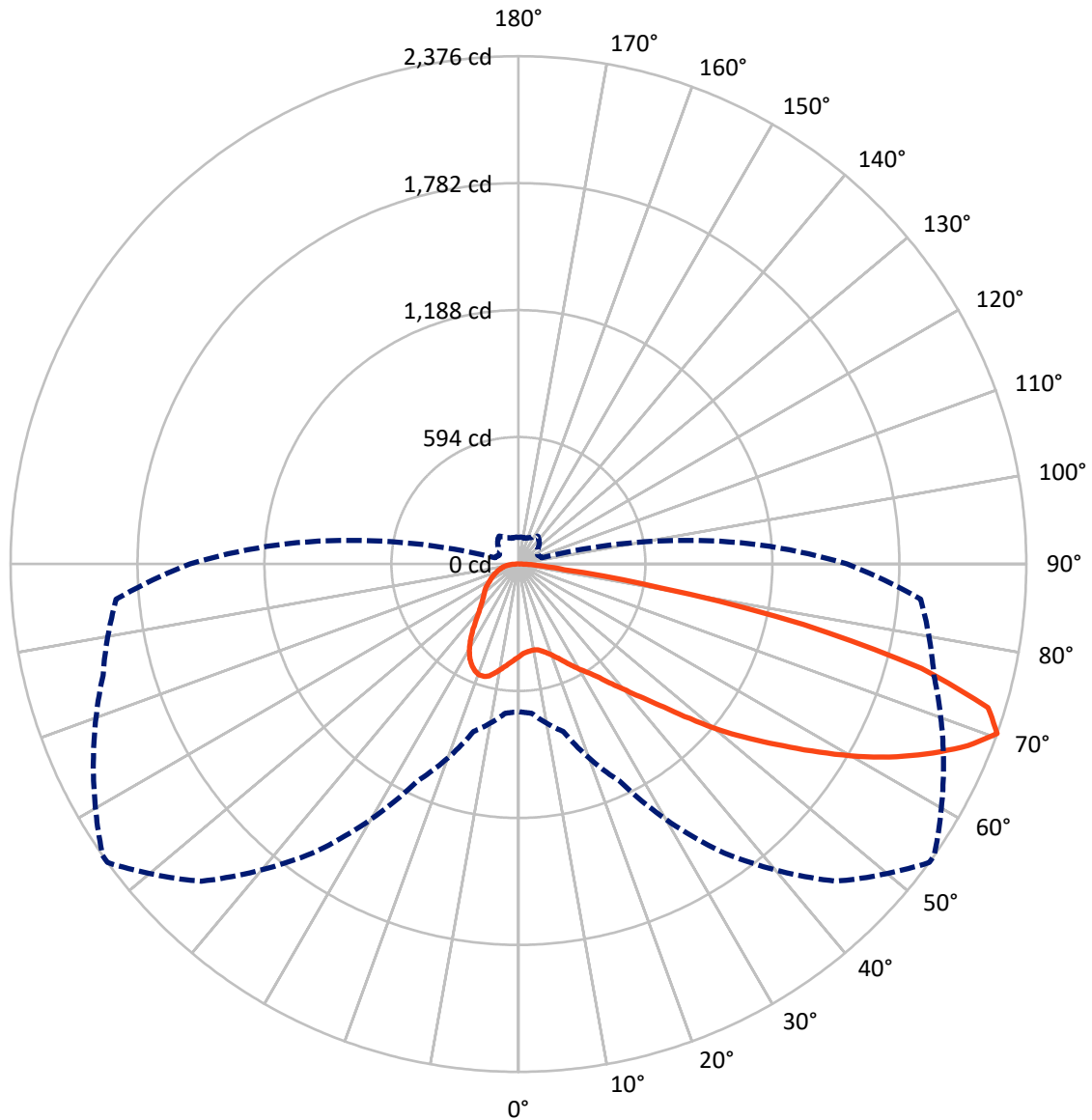


Based on 10 foot mounting height. Maximum calculated value = 5 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P214723

CATALOG NUMBER: ARCH-AF16-30-D-U-T3

Luminous Intensity Polar Plot



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

REPORT NUMBER: P214723

CATALOG NUMBER: ARCH-AF16-30-D-U-T3

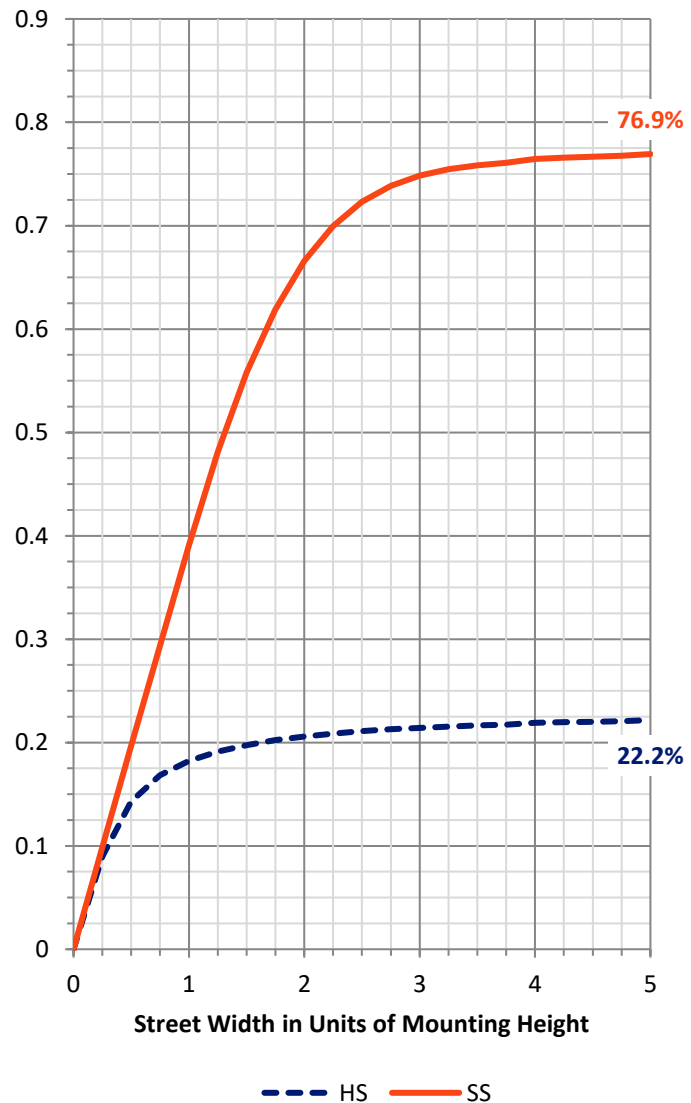
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	878.1	0.0	878.1
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	2993.7	0.0	2993.7
	% Fixture	77.3	0.0	77.3
Total	Lumens	3871.9	0.0	3871.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.5	1.1
10°-20°	135.8	3.5
20°-30°	236.0	6.1
30°-40°	344.9	8.9
40°-50°	541.3	14.0
50°-60°	832.3	21.5
60°-70°	1016.9	26.3
70°-80°	630.5	16.3
80°-90°	91.6	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°	3871.9	100.0
0°-180°	3871.9	100.0

Coefficient of Utilization



REPORT NUMBER: P214723

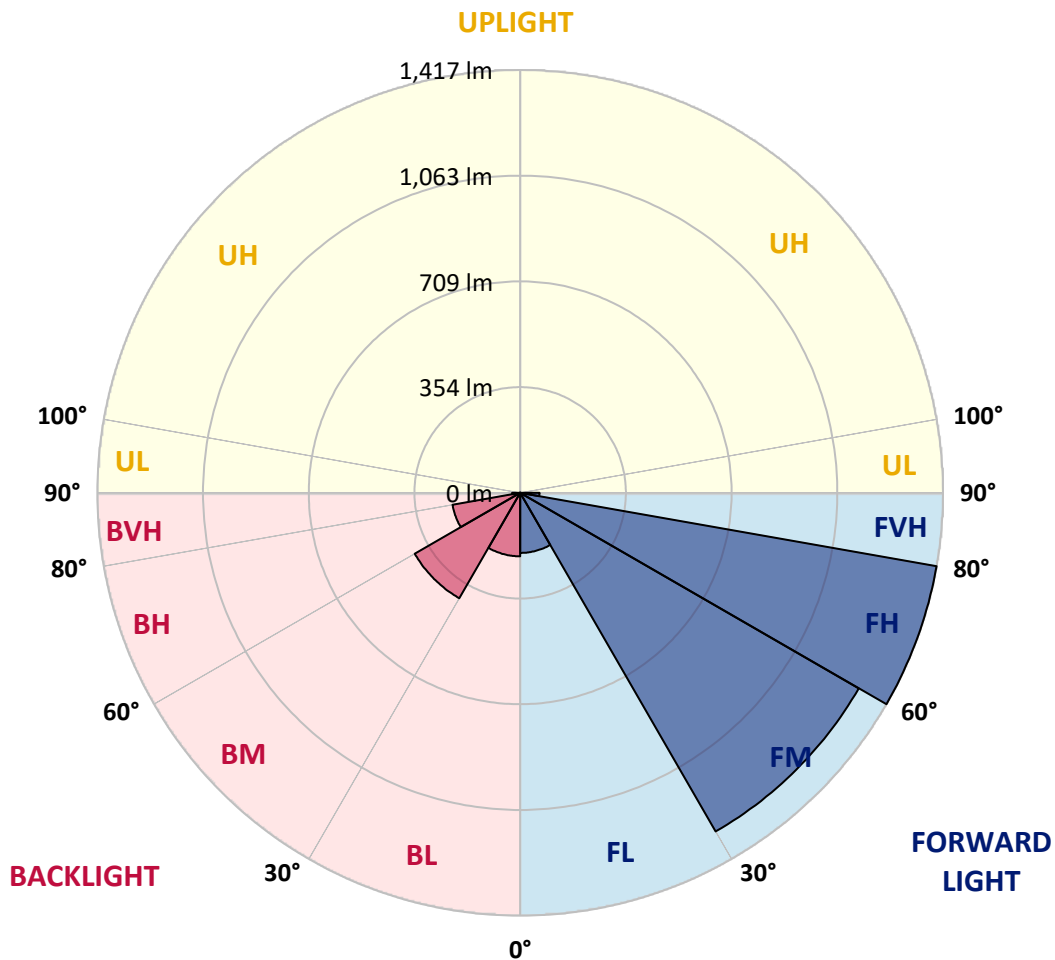
CATALOG NUMBER: ARCH-AF16-30-D-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	201.4	5.2			
FM	(30°-60°)	1310.5	33.8			
FH	(60°-80°)	1417.2	36.6			G1/1800
FVH	(80°-90°)	64.7	1.7			G1/100
BL	(0°-30°)	212.9	5.5	B1/500		
BM	(30°-60°)	408.1	10.5	B1/1000		
BH	(60°-80°)	230.3	5.9	B1/500		G1/500
BVH	(80°-90°)	26.9	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-G1

Type III Short





REPORT NUMBER: P214723

CATALOG NUMBER: ARCH-AF16-30-D-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	433.2	433.2	433.2	433.2	433.2	433.2	433.2	433.2	433.2	433.2	433.2
2.5°	416.1	414.7	414.7	416.9	417.6	419.7	419.7	420.4	422.6	426.1	430.4
5°	403.5	402.7	403.5	406.2	407.6	411.9	413.4	414.1	418.3	424.0	430.4
7.5°	390.7	389.9	391.4	395.6	399.9	406.2	409.8	410.5	416.9	424.6	433.2
10°	386.4	385.7	387.8	391.4	395.6	402.7	408.4	409.1	418.3	427.5	439.6
12.5°	392.1	391.4	393.5	397.0	401.3	406.2	412.7	413.4	425.3	437.4	450.2
15°	406.2	406.2	406.9	409.1	413.4	417.6	423.3	424.0	436.7	450.9	463.7
17.5°	428.2	426.8	426.8	426.1	428.9	431.1	438.1	438.8	452.3	465.1	477.8
20°	455.2	454.5	451.6	448.1	447.3	448.8	455.8	456.5	470.0	480.7	492.8
22.5°	487.7	488.5	482.1	474.3	470.8	472.9	479.3	480.0	489.9	499.1	509.7
25°	531.0	528.9	519.7	508.3	501.2	501.2	507.6	507.6	516.8	522.5	529.6
27.5°	572.1	567.8	559.3	543.1	531.7	533.9	540.2	540.2	548.7	550.9	554.4
30°	616.8	612.5	601.9	581.3	566.5	565.1	572.9	572.1	583.5	582.8	579.9
32.5°	671.4	669.3	651.5	625.3	605.5	600.5	607.6	608.3	615.4	613.3	604.1
35°	748.0	747.3	731.0	684.9	658.7	649.5	653.7	653.7	658.7	652.9	637.4
37.5°	844.3	845.8	831.7	763.5	726.7	711.1	711.8	711.1	712.5	706.1	689.9
40°	940.8	944.4	943.7	861.4	814.6	787.7	777.7	776.3	779.9	777.0	761.5
42.5°	1067.8	1076.2	1056.4	981.9	929.5	884.1	857.1	853.7	861.4	864.9	850.1
45°	1199.6	1196.8	1165.6	1111.6	1064.2	1006.1	955.0	949.3	955.0	965.7	950.0
47.5°	1268.4	1266.2	1258.4	1231.5	1224.4	1157.8	1080.4	1075.5	1064.9	1079.7	1061.3
50°	1381.8	1384.0	1352.0	1349.2	1378.9	1342.1	1222.3	1211.0	1191.7	1203.8	1188.3
52.5°	1464.0	1454.8	1435.0	1459.8	1552.6	1532.8	1355.5	1350.6	1332.9	1330.0	1323.0
55°	1497.4	1497.4	1500.9	1558.4	1690.9	1664.6	1500.2	1505.2	1481.0	1461.2	1470.4
57.5°	1507.3	1511.5	1542.0	1637.0	1853.3	1767.5	1659.7	1666.8	1632.0	1592.3	1621.4
60°	1458.3	1471.1	1544.1	1681.7	1944.7	1876.7	1827.7	1829.9	1779.5	1721.4	1772.5
62.5°	1332.9	1348.5	1478.9	1700.1	1929.8	1988.7	1986.6	1991.5	1922.7	1850.4	1914.2
65°	1179.1	1194.6	1333.6	1648.4	1918.4	2068.8	2131.9	2145.3	2056.7	1959.6	2002.8
67.5°	952.9	973.4	1105.3	1474.0	1863.2	2134.7	2268.0	2282.2	2160.3	2016.3	1995.1
70°	690.5	700.5	811.1	1120.1	1637.7	2098.6	2375.8	2375.1	2194.2	2012.0	1888.7
72.5°	332.5	340.3	436.0	695.5	1171.2	1781.0	2297.8	2311.3	2147.5	1950.4	1645.5
75°	136.9	144.6	176.6	293.5	614.7	1176.9	1947.6	1979.4	1950.4	1750.5	1287.5
77.5°	85.1	87.9	103.5	151.7	280.8	549.4	1363.4	1406.6	1545.6	1402.4	850.1
80°	63.8	66.0	77.2	106.4	177.3	202.7	677.1	731.6	936.5	804.7	384.9
82.5°	53.2	53.9	61.7	77.2	120.5	116.3	217.0	241.7	436.7	307.0	132.6
85°	49.6	51.0	55.3	55.3	76.6	73.0	90.0	94.3	126.9	105.0	46.0
87.5°	25.6	24.1	48.9	43.3	39.7	35.5	38.3	41.1	47.5	50.3	20.6
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: P214723

CATALOG NUMBER: ARCH-AF16-30-D-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	433.2	433.2	433.2	433.2	433.2	433.2	433.2	433.2	433.2	433.2	433.2
2.5°	431.8	433.9	437.4	441.0	445.2	450.2	453.1	456.5	459.4	458.0	457.3
5°	433.9	437.4	445.2	452.3	460.8	470.8	477.1	484.3	489.9	491.3	489.2
7.5°	437.4	443.9	454.5	467.2	478.5	491.3	501.2	511.2	518.2	519.7	519.7
10°	445.9	453.1	467.2	484.3	497.7	511.2	522.5	530.3	536.7	539.5	539.5
12.5°	458.0	466.5	483.5	504.1	518.9	531.7	538.1	541.7	544.5	547.3	548.0
15°	472.2	481.4	502.0	524.0	539.5	545.9	545.9	545.2	545.2	546.7	548.0
17.5°	486.3	496.2	517.5	540.9	550.9	547.3	542.4	540.2	538.8	538.1	540.2
20°	501.2	511.2	532.4	554.4	551.6	536.7	529.6	524.7	520.4	518.2	521.1
22.5°	517.5	526.8	548.7	563.6	542.4	519.7	506.3	498.4	491.3	487.0	489.9
25°	536.7	545.9	567.2	566.5	526.1	494.2	472.9	460.1	452.3	448.1	448.1
27.5°	559.3	567.2	587.8	559.3	503.4	460.1	428.9	416.9	414.7	411.2	411.2
30°	582.8	589.1	606.9	543.1	472.2	415.4	381.5	375.7	376.4	373.0	373.6
32.5°	606.9	613.3	618.3	518.9	431.8	365.1	342.5	338.2	337.5	334.6	331.8
35°	640.9	650.1	619.6	486.3	382.9	323.3	307.0	302.7	298.5	288.6	288.6
37.5°	692.6	702.6	616.1	445.9	332.5	290.7	275.8	270.2	263.0	253.1	249.6
40°	763.5	763.5	608.3	400.6	292.1	264.4	250.3	243.2	235.4	225.5	223.3
42.5°	847.2	827.4	596.3	354.5	262.3	246.7	233.9	226.2	217.0	205.6	204.2
45°	945.1	891.2	579.2	313.3	240.4	236.1	228.3	214.8	199.3	187.2	185.1
47.5°	1040.0	948.6	562.9	284.3	221.9	231.8	225.5	202.7	181.5	164.5	162.3
50°	1144.3	999.6	543.8	260.2	207.8	229.0	221.9	185.1	161.6	149.6	148.2
52.5°	1248.5	1051.4	523.2	234.7	195.7	223.3	213.4	172.3	160.9	144.6	142.5
55°	1358.4	1111.6	499.1	206.3	181.5	212.0	202.0	171.5	165.9	144.6	139.6
57.5°	1465.5	1178.3	460.1	178.7	165.9	195.0	197.8	167.4	155.3	143.2	137.6
60°	1583.8	1249.2	395.6	155.3	152.4	180.8	192.1	158.1	143.2	138.9	136.2
62.5°	1678.9	1313.1	309.1	138.9	141.1	169.4	185.1	152.4	138.2	134.7	134.0
65°	1720.0	1314.4	221.9	124.8	129.7	158.8	178.0	147.5	134.0	132.6	131.9
67.5°	1676.7	1242.2	156.0	111.3	117.6	148.8	168.8	142.5	129.7	130.4	129.0
70°	1537.1	1089.6	114.2	98.5	106.4	138.2	158.8	136.2	124.8	126.2	124.1
72.5°	1286.1	849.4	91.5	87.9	97.2	126.9	148.8	129.0	117.0	117.6	113.4
75°	950.0	562.9	76.6	78.7	86.5	116.3	136.2	119.8	108.4	105.7	102.8
77.5°	565.1	289.3	63.1	68.7	77.2	103.5	121.9	108.4	99.2	94.3	92.2
80°	233.2	117.0	51.8	58.1	67.3	92.2	107.7	95.0	88.6	83.7	80.8
82.5°	92.9	57.4	41.1	47.5	56.7	80.1	94.3	83.7	77.2	73.8	66.0
85°	35.5	28.3	27.6	33.3	42.6	61.7	77.9	70.2	65.3	56.1	53.9
87.5°	14.2	12.8	12.8	16.3	24.1	39.0	56.1	48.9	51.0	40.4	41.1
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)