

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: P214728

Luminaire Tested: **ARCH-AF24-30-D-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214728
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-AF24-30-D-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4071.4 lumens
Efficiency: N/A
Efficacy: 131.3 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

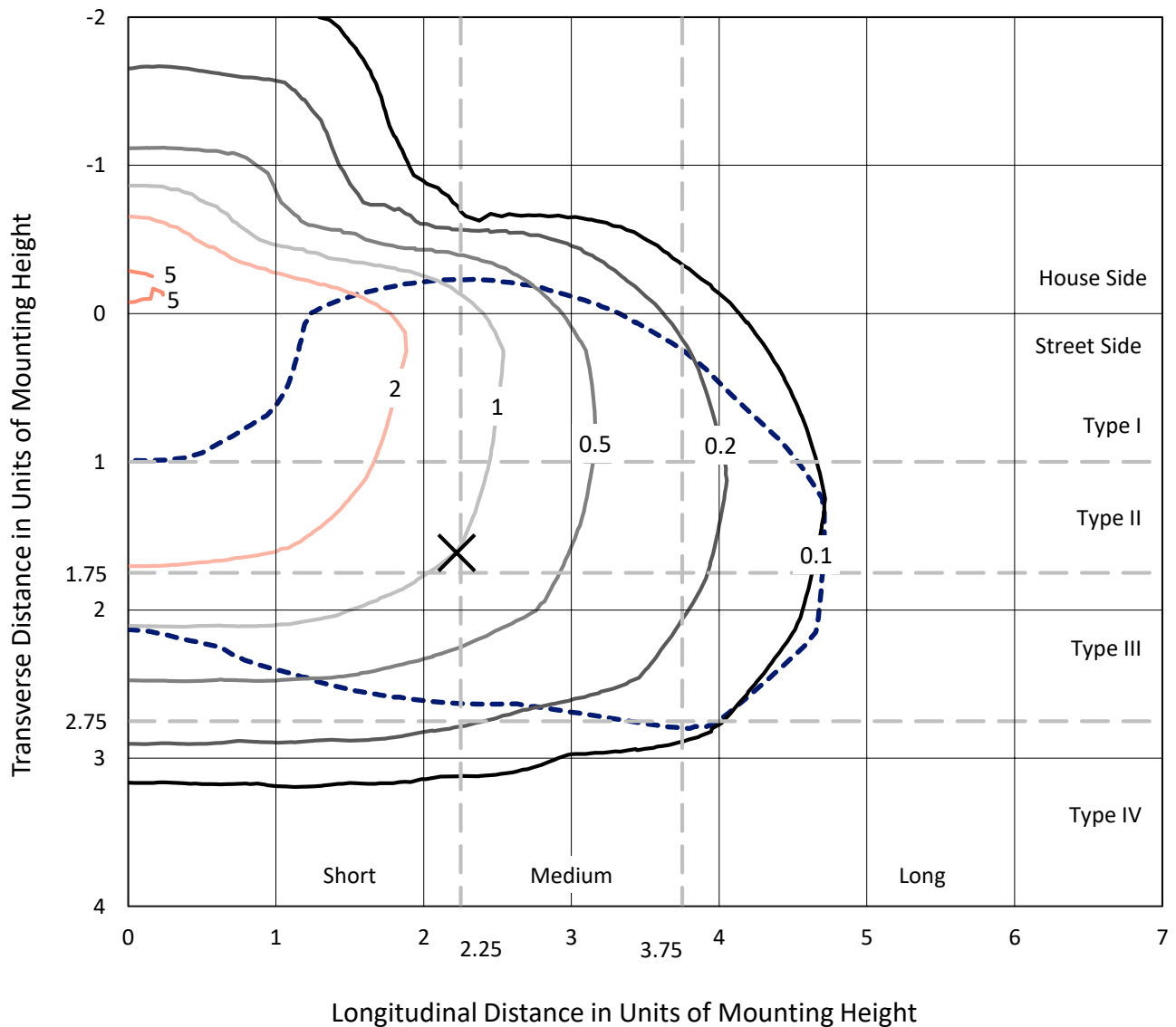
Input Watts (W): 31
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

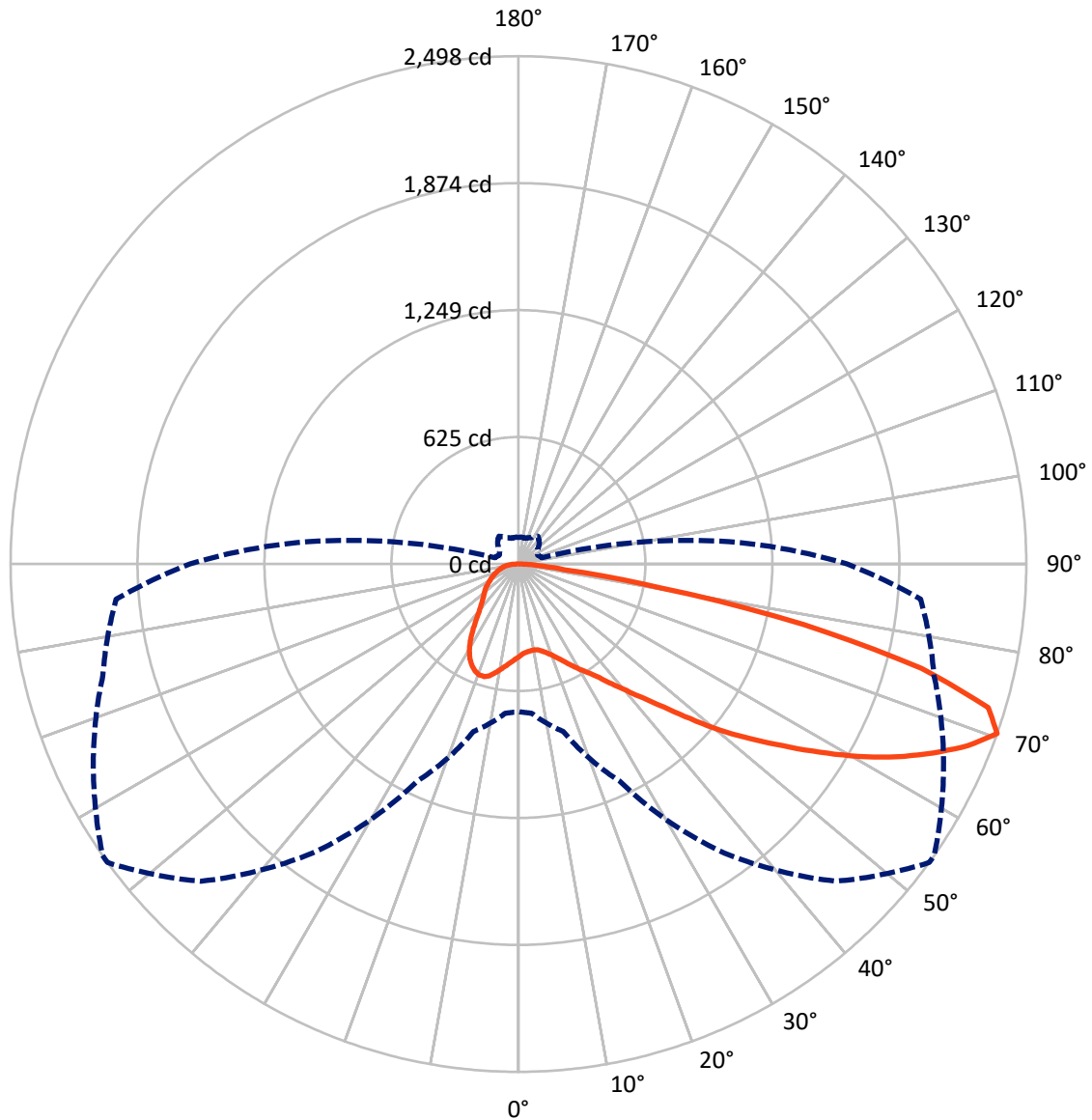


Based on 10 foot mounting height. Maximum calculated value = 5.3 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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



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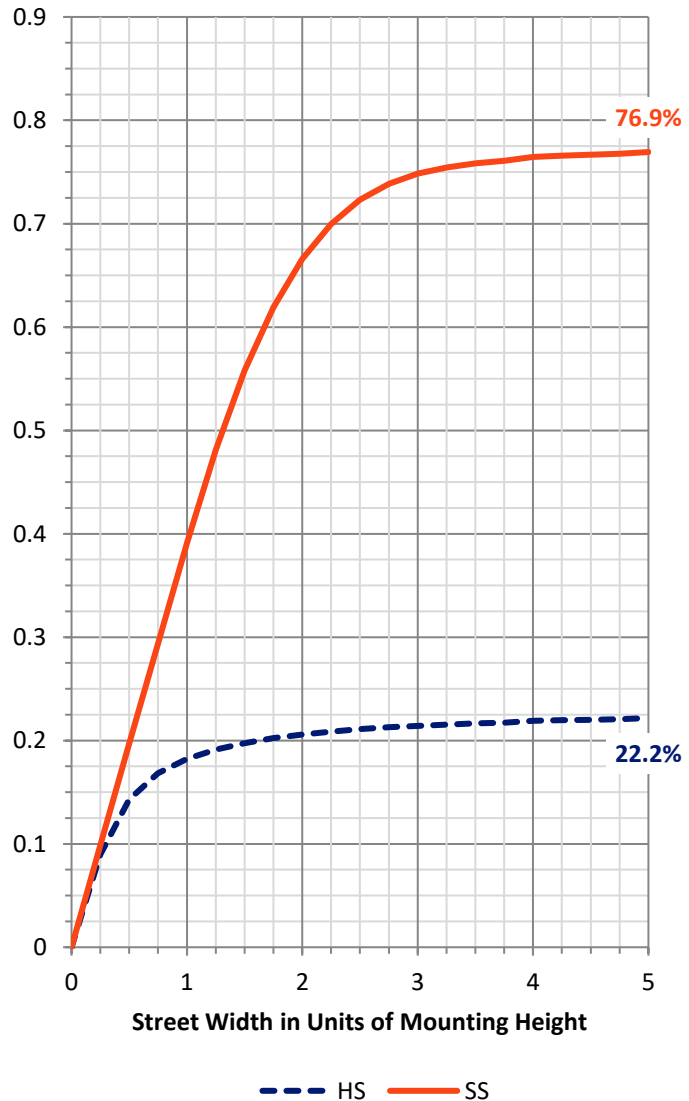
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	923.4	0.0	923.4
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	3148.0	0.0	3148.0
	% Fixture	77.3	0.0	77.3
Total	Lumens	4071.4	0.0	4071.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.7	1.1
10°-20°	142.8	3.5
20°-30°	248.2	6.1
30°-40°	362.6	8.9
40°-50°	569.2	14.0
50°-60°	875.2	21.5
60°-70°	1069.3	26.3
70°-80°	663.0	16.3
80°-90°	96.3	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°	4071.4	100.0
0°-180°	4071.4	100.0

Coefficient of Utilization



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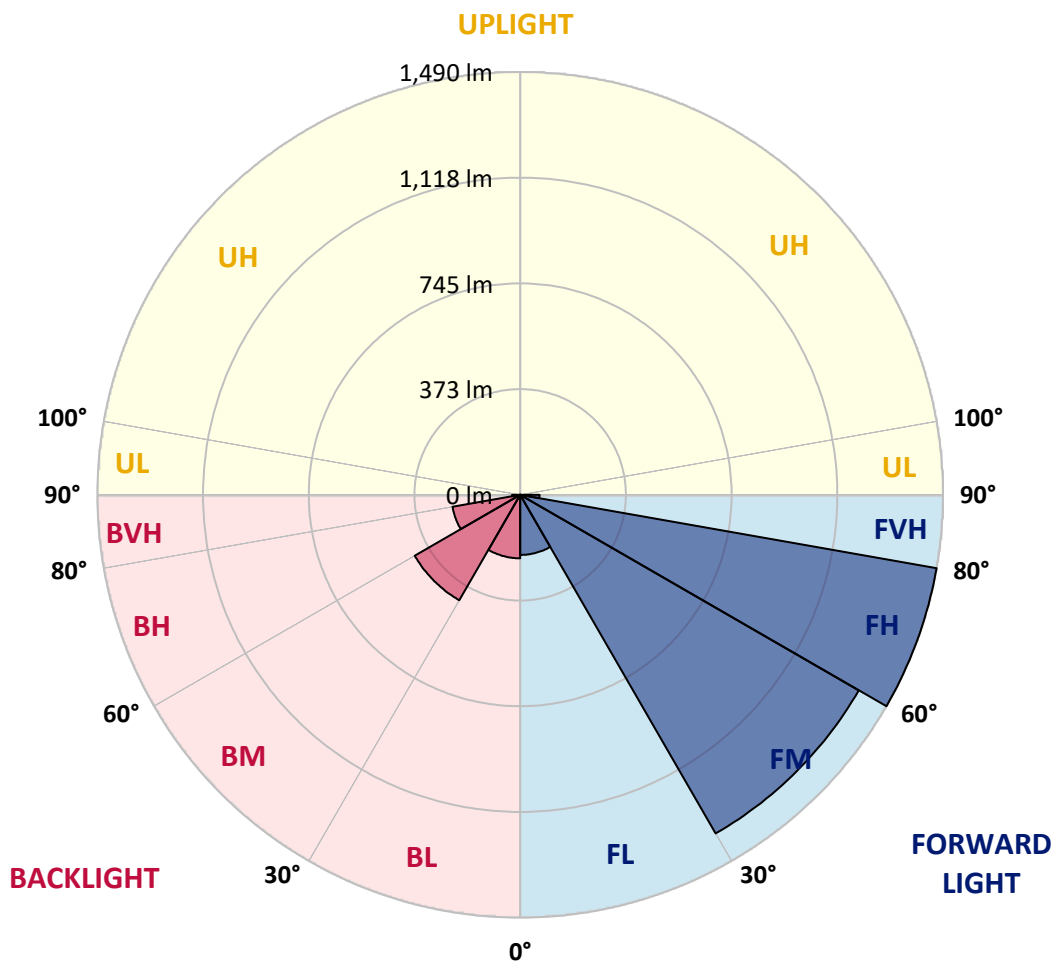
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	211.8	5.2			
FM	(30°-60°)	1378.0	33.8			
FH	(60°-80°)	1490.2	36.6			G1/1800
FVH	(80°-90°)	68.0	1.7			G1/100
BL	(0°-30°)	223.9	5.5	B1/500		
BM	(30°-60°)	429.1	10.5	B1/1000		
BH	(60°-80°)	242.1	5.9	B1/500		G1/500
BVH	(80°-90°)	28.3	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5
2.5°	437.6	436.1	436.1	438.3	439.1	441.3	441.3	442.1	444.3	448.1	452.6
5°	424.2	423.4	424.2	427.2	428.6	433.1	434.7	435.4	439.9	445.8	452.6
7.5°	410.8	410.0	411.5	416.0	420.4	427.2	430.9	431.7	438.3	446.5	455.5
10°	406.3	405.6	407.7	411.5	416.0	423.4	429.4	430.2	439.9	449.6	462.2
12.5°	412.2	411.5	413.8	417.5	422.0	427.2	433.8	434.7	447.3	460.0	473.4
15°	427.2	427.2	427.9	430.2	434.7	439.1	445.1	445.8	459.2	474.1	487.5
17.5°	450.3	448.8	448.8	448.1	451.0	453.3	460.7	461.5	475.7	489.1	502.5
20°	478.6	477.8	474.9	471.2	470.5	471.9	479.4	480.1	494.3	505.4	518.1
22.5°	512.9	513.6	507.0	498.8	495.0	497.3	504.0	504.7	515.2	524.9	536.0
25°	558.4	556.2	546.5	534.5	527.0	527.0	533.8	533.8	543.5	549.4	556.9
27.5°	601.6	597.1	588.2	571.0	559.1	561.4	568.0	568.0	577.0	579.3	583.0
30°	648.6	644.2	632.9	611.3	595.7	594.1	602.4	601.6	613.6	612.8	609.8
32.5°	706.0	703.8	685.1	657.6	636.7	631.5	638.9	639.7	647.1	644.9	635.2
35°	786.5	785.7	768.6	720.2	692.5	682.9	687.3	687.3	692.5	686.6	670.2
37.5°	887.9	889.4	874.5	802.9	764.1	747.8	748.5	747.8	749.2	742.6	725.4
40°	989.3	993.0	992.3	905.8	856.6	828.3	817.8	816.3	820.1	817.0	800.7
42.5°	1122.7	1131.7	1110.8	1032.6	977.3	929.7	901.3	897.5	905.8	909.5	893.9
45°	1261.4	1258.4	1225.6	1168.9	1119.0	1057.8	1004.2	998.2	1004.2	1015.4	999.0
47.5°	1333.7	1331.5	1323.3	1295.0	1287.5	1217.4	1136.2	1131.0	1119.7	1135.4	1116.0
50°	1453.0	1455.2	1421.7	1418.7	1450.0	1411.3	1285.2	1273.3	1253.2	1265.9	1249.4
52.5°	1539.4	1529.7	1508.9	1534.9	1632.6	1611.8	1425.4	1420.2	1401.5	1398.6	1391.1
55°	1574.5	1574.5	1578.2	1638.6	1778.0	1750.5	1577.5	1582.7	1557.3	1536.5	1546.2
57.5°	1585.0	1589.4	1621.5	1721.3	1948.7	1858.5	1745.3	1752.7	1716.1	1674.4	1705.0
60°	1533.5	1546.9	1623.7	1768.4	2044.9	1973.4	1921.9	1924.2	1871.2	1810.1	1863.7
62.5°	1401.5	1417.9	1555.1	1787.7	2029.2	2091.1	2088.9	2094.1	2021.8	1945.8	2012.9
65°	1239.8	1256.2	1402.3	1733.3	2017.4	2175.4	2241.7	2255.9	2162.7	2060.5	2106.1
67.5°	1002.0	1023.6	1162.3	1549.9	1959.2	2244.7	2384.9	2399.7	2271.6	2120.2	2097.9
70°	726.1	736.5	852.8	1177.9	1722.1	2206.7	2498.1	2497.4	2307.4	2115.8	1986.1
72.5°	349.6	357.8	458.5	731.3	1231.5	1872.7	2416.2	2430.3	2258.2	2050.9	1730.3
75°	143.9	152.1	185.7	308.6	646.3	1237.6	2047.8	2081.4	2050.9	1840.6	1353.9
77.5°	89.5	92.5	108.8	159.6	295.2	577.8	1433.6	1479.1	1625.2	1474.6	893.9
80°	67.1	69.4	81.2	111.8	186.4	213.2	712.0	769.4	984.8	846.2	404.8
82.5°	56.0	56.7	64.9	81.2	126.7	122.2	228.1	254.2	459.2	322.8	139.4
85°	52.2	53.7	58.1	58.1	80.5	76.8	94.7	99.1	133.5	110.4	48.5
87.5°	26.8	25.4	51.5	45.5	41.7	37.2	40.3	43.3	49.9	52.9	21.6
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°	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5
2.5°	454.0	456.2	460.0	463.7	468.2	473.4	476.4	480.1	483.0	481.6	480.9
5°	456.2	460.0	468.2	475.7	484.6	495.0	501.8	509.2	515.2	516.6	514.4
7.5°	460.0	466.7	477.8	491.3	503.2	516.6	527.0	537.5	544.9	546.5	546.5
10°	468.9	476.4	491.3	509.2	523.3	537.5	549.4	557.6	564.4	567.3	567.3
12.5°	481.6	490.5	508.4	530.1	545.7	559.1	565.8	569.6	572.5	575.5	576.2
15°	496.5	506.2	527.8	551.0	567.3	574.1	574.1	573.3	573.3	574.8	576.2
17.5°	511.4	521.8	544.2	568.9	579.3	575.5	570.3	568.0	566.6	565.8	568.0
20°	527.0	537.5	559.9	583.0	580.0	564.4	556.9	551.7	547.2	544.9	547.9
22.5°	544.2	553.9	577.0	592.7	570.3	546.5	532.2	524.1	516.6	512.2	515.2
25°	564.4	574.1	596.4	595.7	553.2	519.7	497.3	483.9	475.7	471.2	471.2
27.5°	588.2	596.4	618.1	588.2	529.3	483.9	451.0	438.3	436.1	432.4	432.4
30°	612.8	619.5	638.1	571.0	496.5	436.9	401.1	395.2	395.9	392.1	392.9
32.5°	638.1	644.9	650.1	545.7	454.0	383.9	360.1	355.6	354.9	351.9	348.9
35°	673.9	683.6	651.5	511.4	402.5	339.9	322.8	318.3	313.8	303.4	303.4
37.5°	728.3	738.8	647.8	468.9	349.6	305.7	290.0	284.1	276.6	266.2	262.4
40°	802.9	802.9	639.7	421.3	307.2	278.0	263.2	255.7	247.6	237.1	234.9
42.5°	890.9	870.0	627.0	372.8	275.8	259.4	246.0	237.8	228.1	216.1	214.7
45°	993.8	937.1	609.1	329.5	252.8	248.3	240.1	225.9	209.5	196.8	194.6
47.5°	1093.6	997.5	591.9	298.9	233.3	243.8	237.1	213.2	190.9	173.0	170.7
50°	1203.2	1051.2	571.8	273.6	218.4	240.8	233.3	194.6	170.0	157.3	155.8
52.5°	1312.9	1105.6	550.1	246.7	205.7	234.9	224.4	181.2	169.2	152.1	149.9
55°	1428.3	1168.9	524.9	217.0	190.9	222.9	212.5	180.4	174.4	152.1	146.9
57.5°	1541.0	1239.0	483.9	187.9	174.4	205.0	208.0	175.9	163.3	150.6	144.6
60°	1665.5	1313.6	416.0	163.3	160.3	190.1	202.0	166.2	150.6	146.1	143.1
62.5°	1765.3	1380.7	325.0	146.1	148.3	178.2	194.6	160.3	145.4	141.7	140.9
65°	1808.6	1382.1	233.3	131.2	136.5	166.9	187.1	155.1	140.9	139.4	138.7
67.5°	1763.2	1306.1	164.0	117.0	123.8	156.5	177.4	149.9	136.5	137.2	135.6
70°	1616.3	1145.8	120.0	103.6	111.8	145.4	166.9	143.1	131.2	132.7	130.4
72.5°	1352.3	893.1	96.2	92.5	102.1	133.5	156.5	135.6	123.0	123.8	119.3
75°	999.0	591.9	80.5	82.8	90.9	122.2	143.1	126.0	114.1	111.1	108.1
77.5°	594.1	304.1	66.4	72.3	81.2	108.8	128.2	114.1	104.3	99.1	96.9
80°	245.3	123.0	54.4	61.2	70.8	96.9	113.3	99.9	93.2	88.0	85.0
82.5°	97.7	60.4	43.3	49.9	59.6	84.3	99.1	88.0	81.2	77.5	69.4
85°	37.2	29.9	29.1	35.1	44.7	64.9	82.0	73.8	68.5	58.9	56.7
87.5°	14.9	13.4	13.4	17.2	25.4	41.0	58.9	51.5	53.7	42.5	43.3
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)