

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: P234716

Luminaire Tested: **ARCH-AF24-30-D-U-T3-8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234716
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-T3-8027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3092 lumens
Efficiency: N/A
Efficacy: 99.7 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 (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

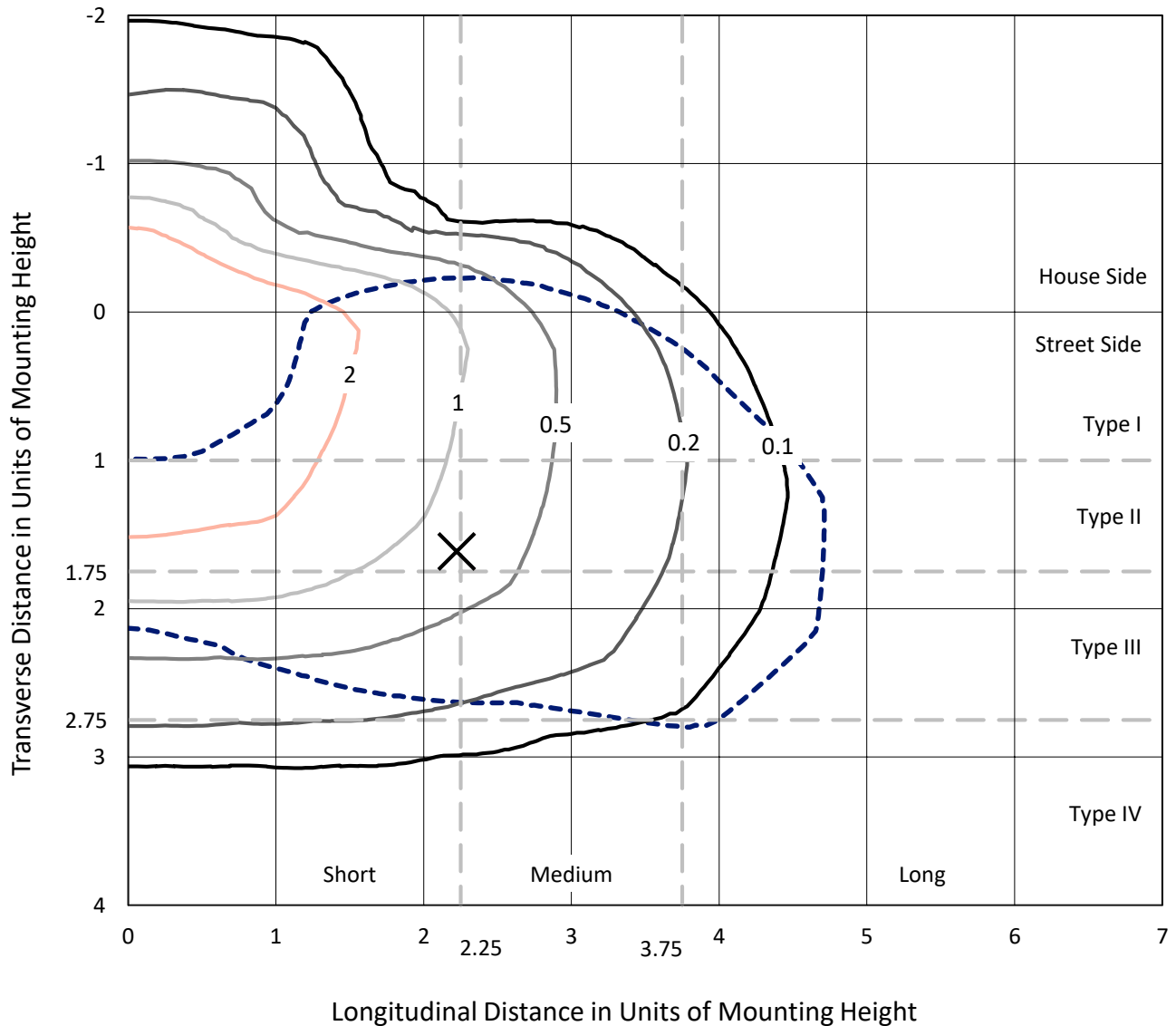




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Iso-Footcandle Lines of Horizontal Illumination

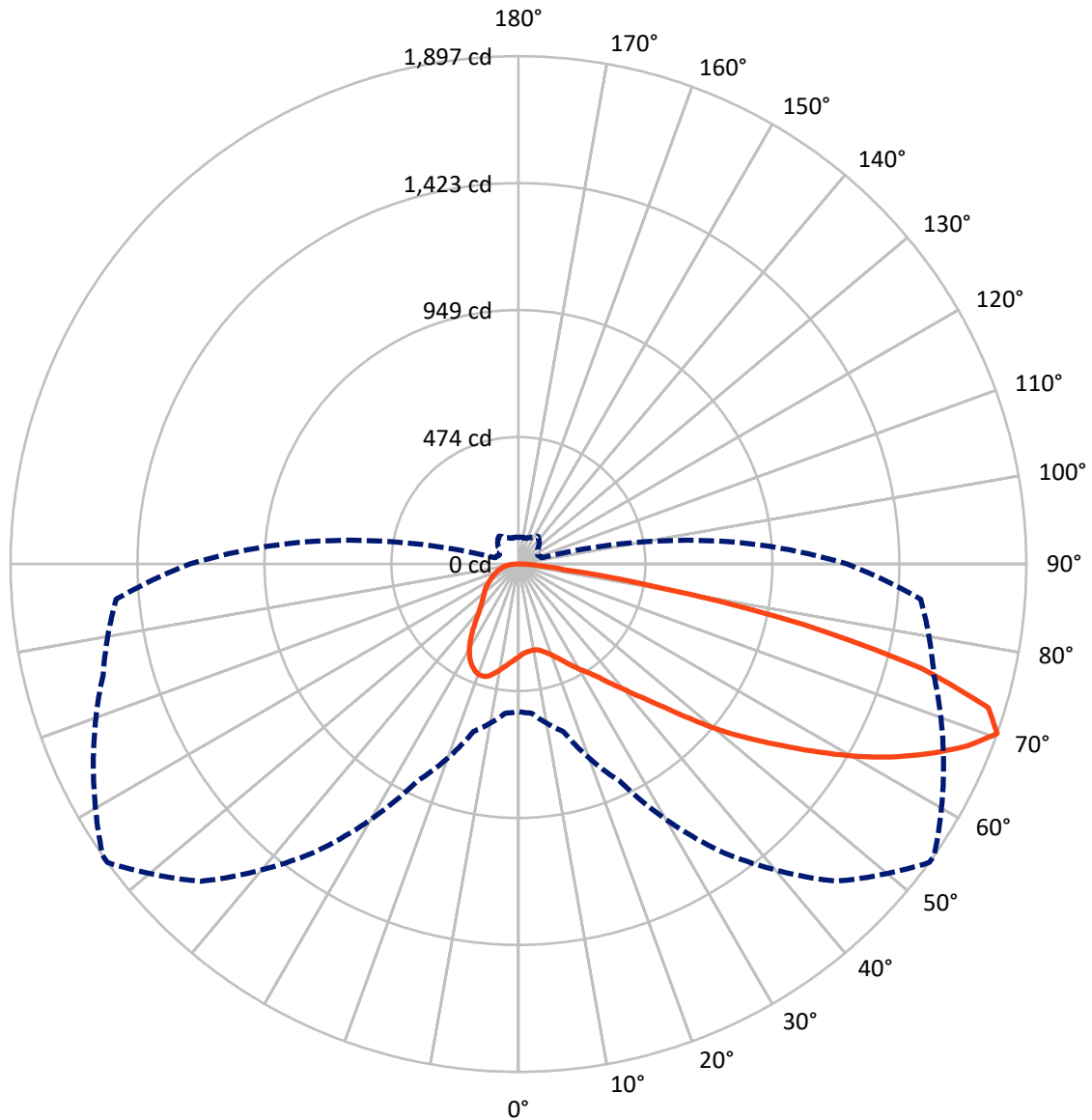
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4 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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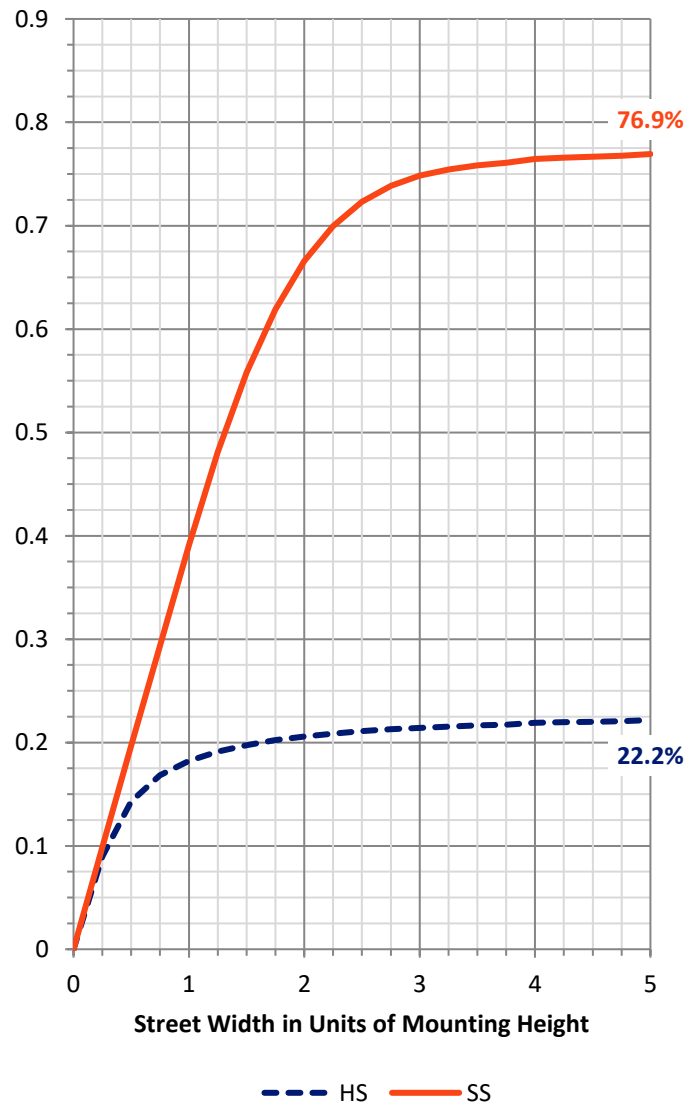
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	701.3	0.0	701.3
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	2390.7	0.0	2390.7
	% Fixture	77.3	0.0	77.3
Total	Lumens	3092.0	0.0	3092.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.9	1.1
10°-20°	108.5	3.5
20°-30°	188.5	6.1
30°-40°	275.4	8.9
40°-50°	432.2	14.0
50°-60°	664.7	21.5
60°-70°	812.1	26.3
70°-80°	503.5	16.3
80°-90°	73.1	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°	3092.0	100.0
0°-180°	3092.0	100.0

Coefficient of Utilization



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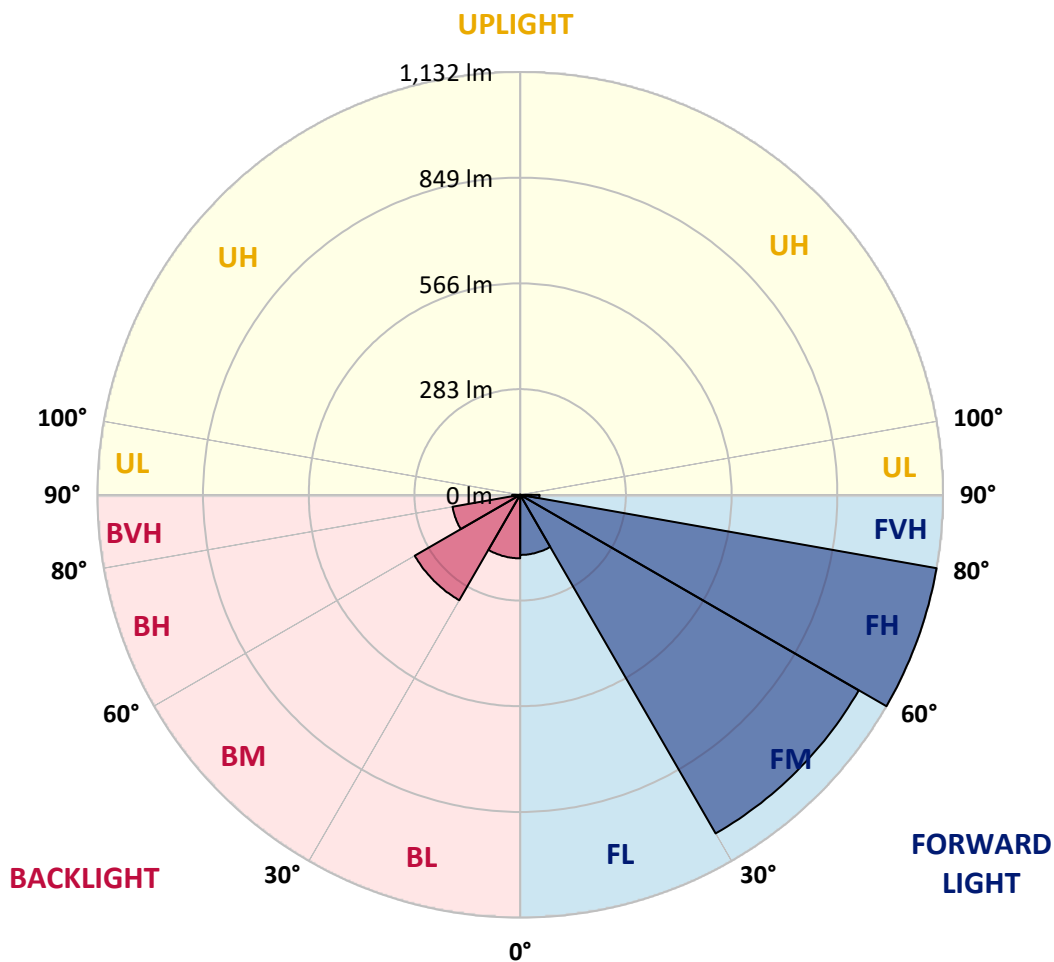
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	160.9	5.2			
FM	(30°-60°)	1046.5	33.8			
FH	(60°-80°)	1131.7	36.6			G1/1800
FVH	(80°-90°)	51.6	1.7			G1/100
BL	(0°-30°)	170.0	5.5	B1/500		
BM	(30°-60°)	325.9	10.5	B1/1000		
BH	(60°-80°)	183.9	5.9	B1/500		G1/500
BVH	(80°-90°)	21.5	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°	345.9	345.9	345.9	345.9	345.9	345.9	345.9	345.9	345.9	345.9	345.9
2.5°	332.3	331.2	331.2	332.9	333.5	335.2	335.2	335.7	337.4	340.3	343.7
5°	322.2	321.6	322.2	324.4	325.6	328.9	330.1	330.6	334.0	338.6	343.7
7.5°	312.0	311.4	312.5	315.9	319.3	324.4	327.2	327.8	332.9	339.1	345.9
10°	308.6	308.0	309.7	312.5	315.9	321.6	326.1	326.7	334.0	341.4	351.0
12.5°	313.1	312.5	314.2	317.1	320.5	324.4	329.5	330.1	339.7	349.3	359.5
15°	324.4	324.4	325.0	326.7	330.1	333.5	338.0	338.6	348.8	360.1	370.3
17.5°	342.0	340.8	340.8	340.3	342.5	344.2	349.9	350.5	361.2	371.4	381.6
20°	363.5	362.9	360.7	357.8	357.3	358.4	364.0	364.6	375.4	383.9	393.5
22.5°	389.5	390.1	385.0	378.8	375.9	377.6	382.7	383.3	391.2	398.6	407.1
25°	424.1	422.4	415.0	405.9	400.3	400.3	405.4	405.4	412.7	417.3	422.9
27.5°	456.9	453.5	446.7	433.7	424.6	426.3	431.4	431.4	438.2	439.9	442.7
30°	492.6	489.2	480.7	464.3	452.4	451.2	457.5	456.9	466.0	465.4	463.1
32.5°	536.2	534.5	520.3	499.4	483.5	479.5	485.2	485.8	491.4	489.7	482.4
35°	597.3	596.7	583.7	546.9	526.0	518.6	522.0	522.0	526.0	521.4	509.0
37.5°	674.3	675.4	664.1	609.8	580.3	567.9	568.4	567.9	569.0	563.9	550.9
40°	751.3	754.1	753.6	687.9	650.5	629.0	621.1	620.0	622.8	620.5	608.1
42.5°	852.7	859.5	843.6	784.2	742.3	706.0	684.5	681.7	687.9	690.7	678.8
45°	958.0	955.7	930.8	887.8	849.8	803.4	762.6	758.1	762.6	771.1	758.7
47.5°	1012.9	1011.2	1005.0	983.4	977.8	924.6	862.8	858.9	850.4	862.3	847.6
50°	1103.5	1105.2	1079.7	1077.4	1101.2	1071.8	976.1	967.0	951.7	961.4	948.9
52.5°	1169.1	1161.8	1145.9	1165.8	1239.9	1224.1	1082.5	1078.6	1064.4	1062.1	1056.5
55°	1195.8	1195.8	1198.6	1244.5	1350.3	1329.4	1198.0	1202.0	1182.7	1166.9	1174.2
57.5°	1203.7	1207.1	1231.4	1307.3	1480.0	1411.5	1325.4	1331.1	1303.3	1271.6	1294.8
60°	1164.6	1174.8	1233.1	1343.0	1553.0	1498.7	1459.6	1461.3	1421.1	1374.7	1415.4
62.5°	1064.4	1076.9	1181.0	1357.7	1541.1	1588.1	1586.4	1590.4	1535.5	1477.7	1528.7
65°	941.5	954.0	1065.0	1316.4	1532.1	1652.1	1702.5	1713.2	1642.5	1564.9	1599.4
67.5°	760.9	777.4	882.7	1177.1	1487.9	1704.8	1811.2	1822.5	1725.1	1610.2	1593.2
70°	551.5	559.4	647.7	894.6	1307.9	1675.9	1897.2	1896.7	1752.3	1606.8	1508.3
72.5°	265.5	271.8	348.2	555.4	935.3	1422.2	1835.0	1845.7	1714.9	1557.5	1314.1
75°	109.3	115.5	141.0	234.4	490.9	939.8	1555.3	1580.8	1557.5	1397.9	1028.2
77.5°	67.9	70.2	82.7	121.2	224.2	438.8	1088.8	1123.3	1234.3	1119.9	678.8
80°	51.0	52.7	61.7	84.9	141.5	161.9	540.7	584.3	747.9	642.6	307.4
82.5°	42.5	43.0	49.3	61.7	96.2	92.9	173.2	193.1	348.8	245.2	105.9
85°	39.6	40.8	44.2	44.2	61.1	58.3	71.9	75.3	101.3	83.8	36.8
87.5°	20.4	19.2	39.1	34.5	31.7	28.3	30.6	32.8	37.9	40.2	16.4
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°	345.9	345.9	345.9	345.9	345.9	345.9	345.9	345.9	345.9	345.9	345.9
2.5°	344.8	346.5	349.3	352.2	355.6	359.5	361.8	364.6	366.9	365.7	365.2
5°	346.5	349.3	355.6	361.2	368.0	375.9	381.0	386.7	391.2	392.4	390.7
7.5°	349.3	354.4	362.9	373.1	382.2	392.4	400.3	408.2	413.9	415.0	415.0
10°	356.1	361.8	373.1	386.7	397.5	408.2	417.3	423.5	428.6	430.9	430.9
12.5°	365.7	372.5	386.1	402.5	414.4	424.6	429.7	432.6	434.8	437.1	437.7
15°	377.1	384.4	400.9	418.4	430.9	436.0	436.0	435.4	435.4	436.5	437.7
17.5°	388.4	396.3	413.3	432.0	439.9	437.1	433.1	431.4	430.3	429.7	431.4
20°	400.3	408.2	425.2	442.7	440.5	428.6	422.9	419.0	415.6	413.9	416.1
22.5°	413.3	420.7	438.2	450.1	433.1	415.0	404.2	398.0	392.4	389.0	391.2
25°	428.6	436.0	452.9	452.4	420.1	394.6	377.6	367.4	361.2	357.8	357.8
27.5°	446.7	452.9	469.4	446.7	402.0	367.4	342.5	332.9	331.2	328.4	328.4
30°	465.4	470.5	484.6	433.7	377.1	331.8	304.6	300.1	300.6	297.8	298.4
32.5°	484.6	489.7	493.7	414.4	344.8	291.6	273.5	270.1	269.5	267.2	265.0
35°	511.8	519.2	494.8	388.4	305.7	258.2	245.2	241.8	238.4	230.4	230.4
37.5°	553.2	561.1	492.0	356.1	265.5	232.1	220.2	215.7	210.1	202.1	199.3
40°	609.8	609.8	485.8	319.9	233.3	211.2	199.9	194.2	188.0	180.0	178.3
42.5°	676.6	660.7	476.2	283.1	209.5	197.0	186.8	180.6	173.2	164.2	163.1
45°	754.7	711.7	462.6	250.2	191.9	188.5	182.3	171.6	159.1	149.5	147.8
47.5°	830.6	757.5	449.5	227.0	177.2	185.1	180.0	161.9	144.9	131.4	129.7
50°	913.8	798.3	434.3	207.8	165.9	182.9	177.2	147.8	129.1	119.5	118.3
52.5°	997.0	839.6	417.8	187.4	156.3	178.3	170.4	137.6	128.5	115.5	113.8
55°	1084.8	887.8	398.6	164.8	144.9	169.3	161.4	137.0	132.5	115.5	111.5
57.5°	1170.3	941.0	367.4	142.7	132.5	155.7	158.0	133.6	124.0	114.4	109.8
60°	1264.8	997.6	315.9	124.0	121.7	144.4	153.4	126.3	114.4	111.0	108.7
62.5°	1340.7	1048.6	246.9	111.0	112.7	135.3	147.8	121.7	110.4	107.6	107.0
65°	1373.5	1049.7	177.2	99.6	103.6	126.8	142.1	117.8	107.0	105.9	105.3
67.5°	1339.0	991.9	124.6	88.9	94.0	118.9	134.7	113.8	103.6	104.2	103.0
70°	1227.5	870.2	91.2	78.7	84.9	110.4	126.8	108.7	99.6	100.8	99.1
72.5°	1027.0	678.3	73.0	70.2	77.6	101.3	118.9	103.0	93.4	94.0	90.6
75°	758.7	449.5	61.1	62.8	69.1	92.9	108.7	95.7	86.6	84.4	82.1
77.5°	451.2	231.0	50.4	54.9	61.7	82.7	97.4	86.6	79.3	75.3	73.6
80°	186.3	93.4	41.3	46.4	53.8	73.6	86.1	75.9	70.8	66.8	64.5
82.5°	74.2	45.9	32.8	37.9	45.3	64.0	75.3	66.8	61.7	58.9	52.7
85°	28.3	22.6	22.1	26.6	34.0	49.3	62.3	56.1	52.1	44.7	43.0
87.5°	11.3	10.2	10.2	13.0	19.2	31.1	44.7	39.1	40.8	32.3	32.8
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)