

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: P214867

Luminaire Tested: **ARCH-AF24-20-D-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214867
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-20-D-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2889.8 lumens
Efficiency: N/A
Efficacy: 137.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 21
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

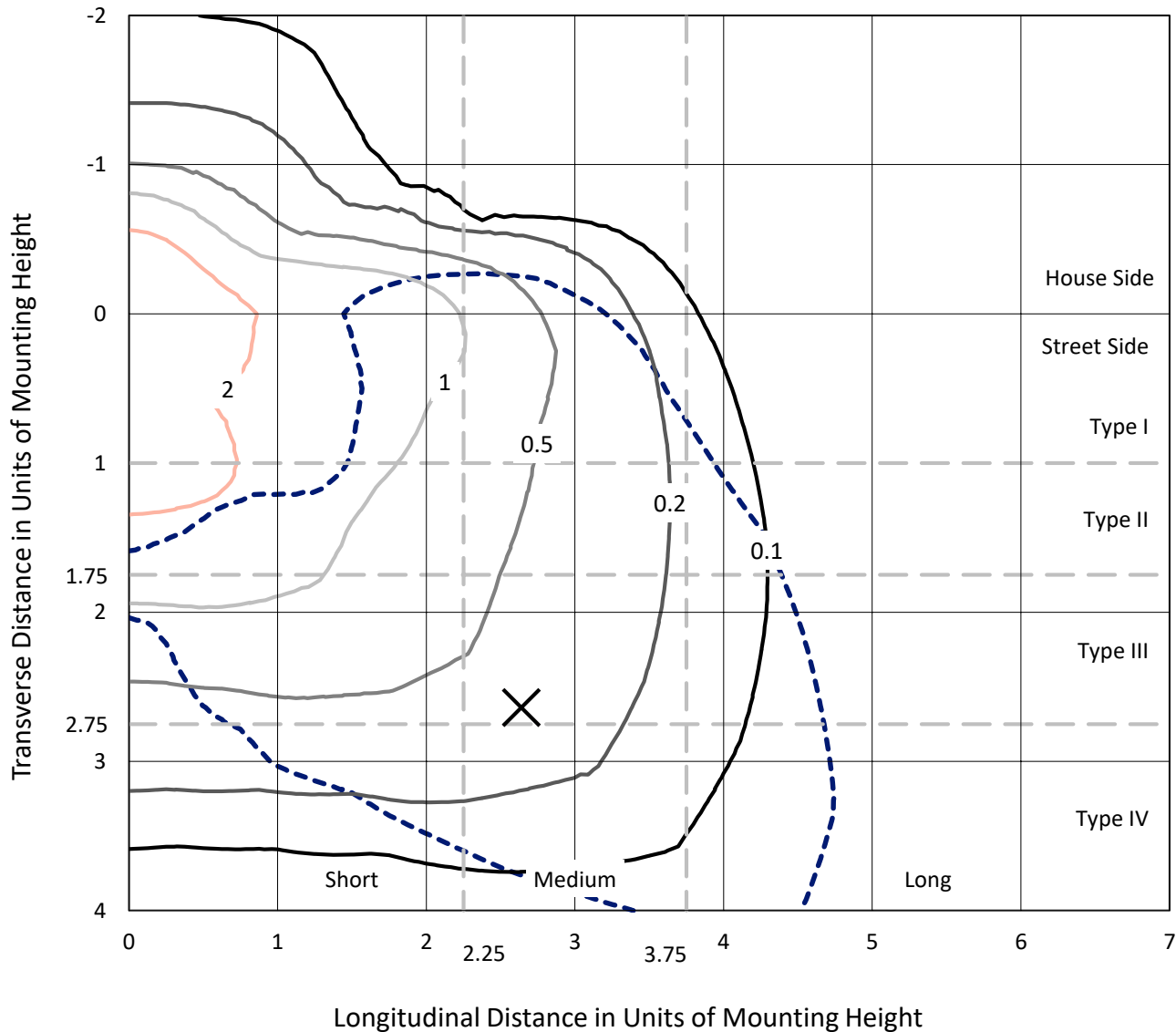


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

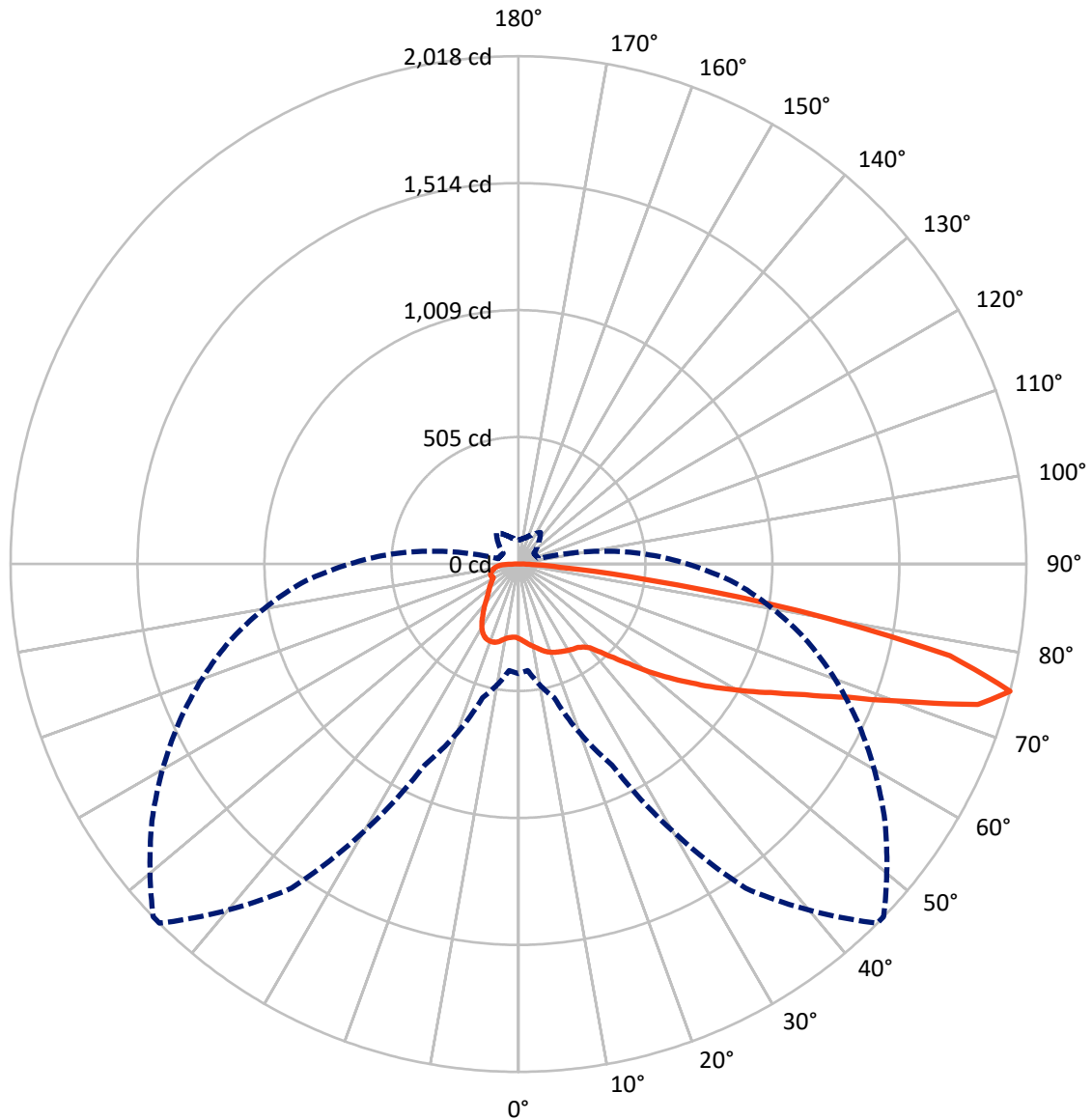


Based on 10 foot mounting height. Maximum calculated value = 3.5 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



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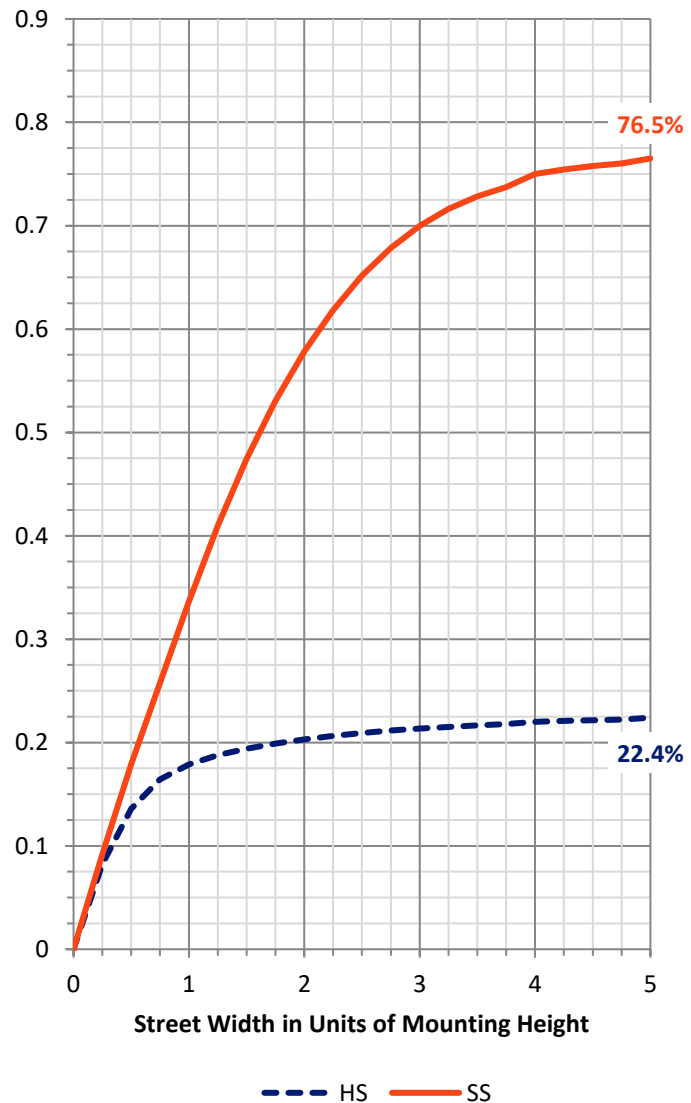
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	669.5	0.0	669.5
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	2220.4	0.0	2220.4
	% Fixture	76.8	0.0	76.8
Total	Lumens	2889.8	0.0	2889.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.4	1.0
10°-20°	95.1	3.3
20°-30°	163.3	5.6
30°-40°	228.3	7.9
40°-50°	334.9	11.6
50°-60°	521.7	18.1
60°-70°	750.8	26.0
70°-80°	654.0	22.6
80°-90°	112.3	3.9
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°	2889.8	100.0
0°-180°	2889.8	100.0

Coefficient of Utilization



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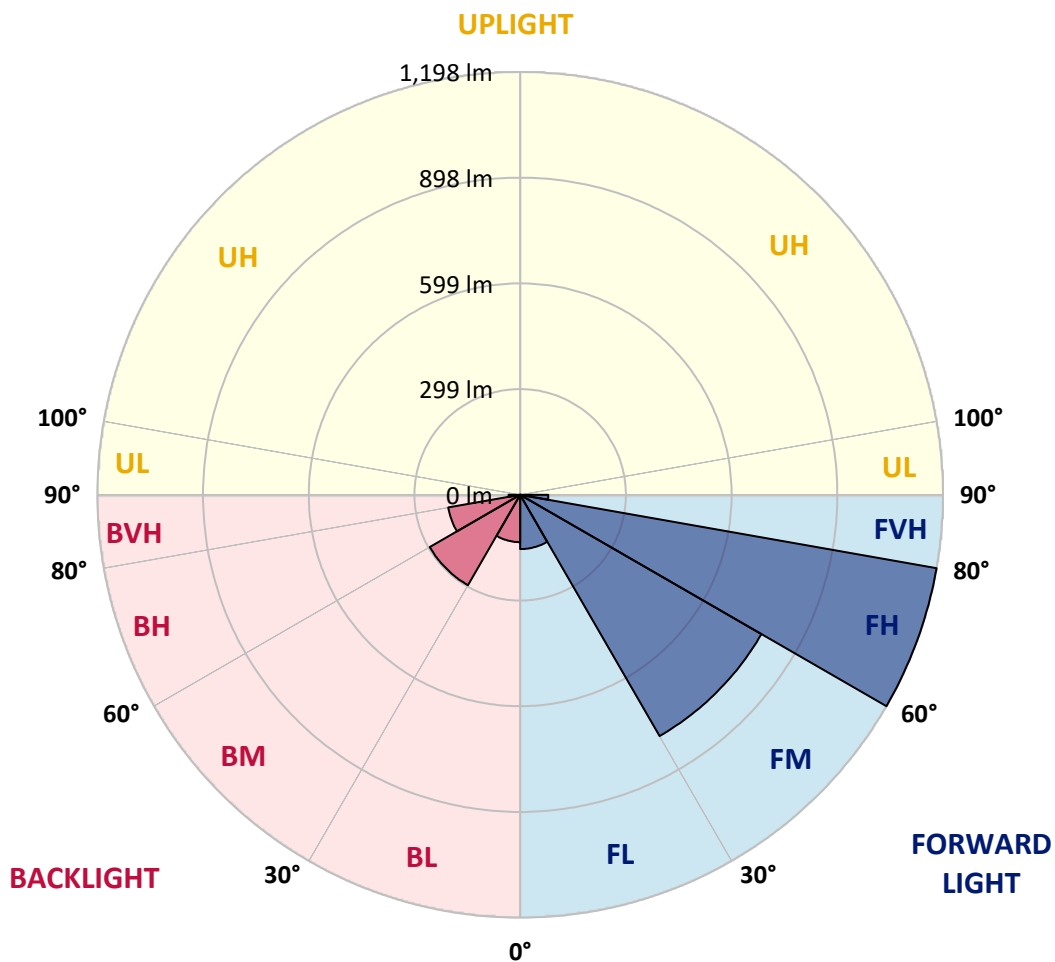
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	153.7	5.3			
FM	(30°-60°)	789.2	27.3			
FH	(60°-80°)	1197.9	41.5			G1/1800
FVH	(80°-90°)	79.7	2.8			G1/100
BL	(0°-30°)	134.1	4.6	B1/500		
BM	(30°-60°)	295.9	10.2	B1/1000		
BH	(60°-80°)	206.9	7.2	B1/500		G1/500
BVH	(80°-90°)	32.6	1.1			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 IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	296.2	296.2	296.2	296.2	296.2	296.2	296.2	296.2	296.2	296.2	296.2
2.5°	310.9	308.6	308.6	306.9	306.9	304.1	303.0	302.4	299.6	298.0	296.2
5°	328.9	326.0	325.5	321.5	319.9	313.6	313.1	309.1	304.1	299.1	295.1
7.5°	345.1	343.5	340.6	336.8	331.6	323.8	323.3	317.0	308.6	301.9	296.2
10°	357.0	355.9	351.9	346.9	341.3	333.4	332.8	326.0	315.9	308.0	300.1
12.5°	371.0	369.3	364.3	357.5	351.4	344.0	343.5	337.9	326.6	316.5	306.4
15°	384.5	382.3	376.0	369.3	362.5	356.4	356.4	350.3	338.4	326.6	314.8
17.5°	391.3	390.2	383.9	376.7	371.0	366.5	365.9	360.3	348.5	336.1	323.3
20°	393.5	394.0	388.4	380.5	376.7	374.4	373.8	369.9	357.0	345.1	332.8
22.5°	392.9	394.7	390.2	381.7	380.5	380.5	380.5	376.0	365.9	354.1	341.8
25°	395.2	397.4	394.0	383.9	383.9	386.2	386.2	383.9	374.9	364.8	352.5
27.5°	403.0	404.8	401.9	387.9	388.4	391.8	391.3	391.8	386.2	376.7	364.3
30°	412.7	414.9	411.5	394.0	393.5	396.9	396.9	399.7	395.8	385.7	375.5
32.5°	438.4	437.9	427.2	400.8	399.2	402.5	402.5	405.3	403.0	395.2	385.7
35°	515.5	507.1	483.4	422.7	405.9	407.5	407.5	412.7	413.8	407.5	399.2
37.5°	594.2	591.4	573.4	481.2	430.6	418.3	417.7	424.9	430.0	424.9	419.3
40°	673.4	671.2	667.3	559.3	482.3	437.3	435.7	441.8	450.8	447.4	444.1
42.5°	747.1	745.9	749.9	636.4	548.1	478.4	473.3	466.1	478.9	477.8	477.8
45°	805.0	807.8	810.1	708.3	619.5	531.2	525.1	500.3	517.7	522.2	525.6
47.5°	837.6	839.8	847.7	778.6	690.9	592.5	588.0	547.5	570.6	584.1	593.6
50°	884.2	878.1	884.9	847.1	776.9	672.3	659.9	611.0	640.3	663.9	686.4
52.5°	929.2	919.1	924.7	926.4	874.7	750.4	737.5	685.8	722.3	759.4	799.3
55°	969.7	969.1	974.8	1003.4	969.1	834.2	819.6	768.4	821.3	861.2	928.6
57.5°	1002.3	1007.9	1032.7	1092.8	1078.2	925.3	909.0	864.6	927.0	966.9	1078.7
60°	1040.5	1049.5	1090.6	1168.7	1177.7	1020.8	1004.0	971.9	1035.4	1075.9	1252.5
62.5°	1053.4	1066.4	1150.7	1248.5	1281.7	1125.5	1110.2	1088.8	1149.6	1186.1	1425.6
65°	967.4	992.2	1183.9	1289.5	1393.6	1251.4	1238.4	1219.9	1263.1	1287.3	1543.1
67.5°	943.9	955.1	1119.2	1348.6	1498.6	1413.2	1400.3	1368.3	1369.4	1359.3	1581.3
70°	910.6	923.0	1052.9	1393.0	1649.3	1634.7	1618.9	1524.5	1466.6	1405.3	1506.0
72.5°	775.8	771.8	907.3	1273.3	1721.8	1909.0	1890.5	1692.6	1538.6	1365.4	1271.0
75°	435.7	424.4	550.3	880.9	1572.3	2018.1	2017.6	1777.5	1488.0	1189.5	865.1
77.5°	126.4	123.1	181.6	369.3	1058.5	1753.3	1774.7	1603.3	1241.8	854.5	475.1
80°	59.6	60.7	78.2	121.9	451.9	1131.6	1192.9	1055.7	742.0	394.0	196.2
82.5°	37.6	38.3	53.4	78.7	191.1	513.8	564.4	475.1	294.0	170.3	86.5
85°	23.6	23.6	35.4	51.8	114.2	164.2	178.2	161.9	125.9	92.8	47.3
87.5°	12.9	12.9	21.4	29.8	62.4	52.9	54.5	64.7	78.7	56.8	23.6
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°	296.2	296.2	296.2	296.2	296.2	296.2	296.2	296.2	296.2	296.2	296.2
2.5°	295.7	294.6	292.9	292.4	291.7	291.2	291.7	292.9	291.7	291.7	292.4
5°	294.0	292.9	290.6	290.6	291.2	291.7	294.6	296.2	296.9	296.9	296.9
7.5°	294.0	292.4	290.6	291.2	292.4	294.6	299.1	301.9	304.1	304.6	304.6
10°	296.9	294.6	293.5	294.6	298.0	299.6	304.1	308.6	311.4	312.5	312.5
12.5°	301.9	299.6	299.6	301.9	306.4	308.6	312.5	315.9	319.3	321.0	321.0
15°	310.3	307.5	308.0	312.0	317.0	319.3	322.1	323.3	326.0	328.3	328.3
17.5°	318.1	315.4	316.5	321.0	324.4	325.5	327.1	326.6	327.8	329.4	330.0
20°	327.1	324.4	324.9	327.8	328.3	327.1	327.1	325.5	324.9	327.8	328.9
22.5°	336.1	333.4	332.8	331.1	328.3	325.5	323.8	322.1	321.0	323.8	324.9
25°	346.9	342.9	340.1	332.8	325.5	320.4	318.1	317.0	316.5	319.3	320.4
27.5°	358.6	354.8	346.3	330.5	318.8	310.3	308.6	308.6	309.7	311.4	312.5
30°	369.9	365.9	350.8	325.5	306.9	294.6	292.9	294.6	297.4	299.1	300.7
32.5°	381.2	377.2	353.6	317.6	289.5	273.7	272.6	275.5	280.0	281.1	282.2
35°	396.3	392.4	357.0	306.4	267.6	250.7	249.6	251.2	255.2	256.9	258.6
37.5°	417.7	415.4	362.0	294.0	247.3	228.8	225.5	224.3	226.6	226.0	228.2
40°	445.8	447.4	371.0	277.7	227.7	208.6	201.2	197.8	195.6	191.1	193.3
42.5°	486.8	487.9	381.2	259.1	210.8	189.5	179.8	173.7	169.2	161.9	163.1
45°	547.0	537.5	392.9	239.5	195.6	174.3	163.1	155.7	149.6	143.3	143.9
47.5°	626.8	597.6	405.9	223.2	180.4	161.9	151.8	143.3	136.1	130.9	131.6
50°	725.2	672.3	418.8	208.0	165.3	152.3	143.3	134.3	127.1	121.9	121.4
52.5°	855.0	762.3	427.2	191.1	150.1	143.9	136.1	127.6	118.7	112.4	111.9
55°	989.9	866.8	434.5	170.9	135.4	134.3	130.4	120.8	110.2	102.3	101.2
57.5°	1138.3	978.7	440.2	151.2	124.2	126.4	125.3	114.2	102.3	95.0	94.4
60°	1273.3	1094.5	422.2	133.8	114.2	118.7	119.8	110.2	104.0	105.7	106.3
62.5°	1409.3	1183.9	353.6	120.8	107.4	113.5	123.1	122.5	119.8	122.5	123.1
65°	1458.2	1202.4	250.7	110.2	100.7	115.8	133.8	132.7	119.8	114.7	113.5
67.5°	1430.7	1147.3	168.7	101.8	95.5	118.7	145.1	132.7	115.3	108.5	106.3
70°	1299.7	1011.9	123.7	93.3	91.0	118.0	151.2	132.1	113.0	105.7	102.9
72.5°	1036.6	780.8	99.5	85.4	84.3	115.3	154.6	130.9	110.8	102.9	99.5
75°	671.2	485.7	83.8	77.5	74.2	110.8	152.9	127.6	107.9	97.8	95.5
77.5°	311.4	209.1	71.4	68.5	64.7	104.0	147.8	120.8	101.8	92.2	89.4
80°	145.1	98.9	60.1	59.6	57.9	98.4	141.1	113.0	94.4	86.5	82.0
82.5°	77.5	59.6	48.9	48.9	50.6	91.7	132.7	103.4	84.9	80.9	69.2
85°	41.0	34.3	35.4	38.3	43.3	80.9	121.4	93.3	74.2	61.8	60.1
87.5°	20.8	21.9	21.9	25.9	33.1	65.8	100.0	77.0	62.9	50.6	49.5
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)