

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: P214713

Luminaire Tested: **ARCH-AF24-20-D-U-T3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214713
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-AF24-20-D-U-T3-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2517 lumens
Efficiency: N/A
Efficacy: 119.9 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

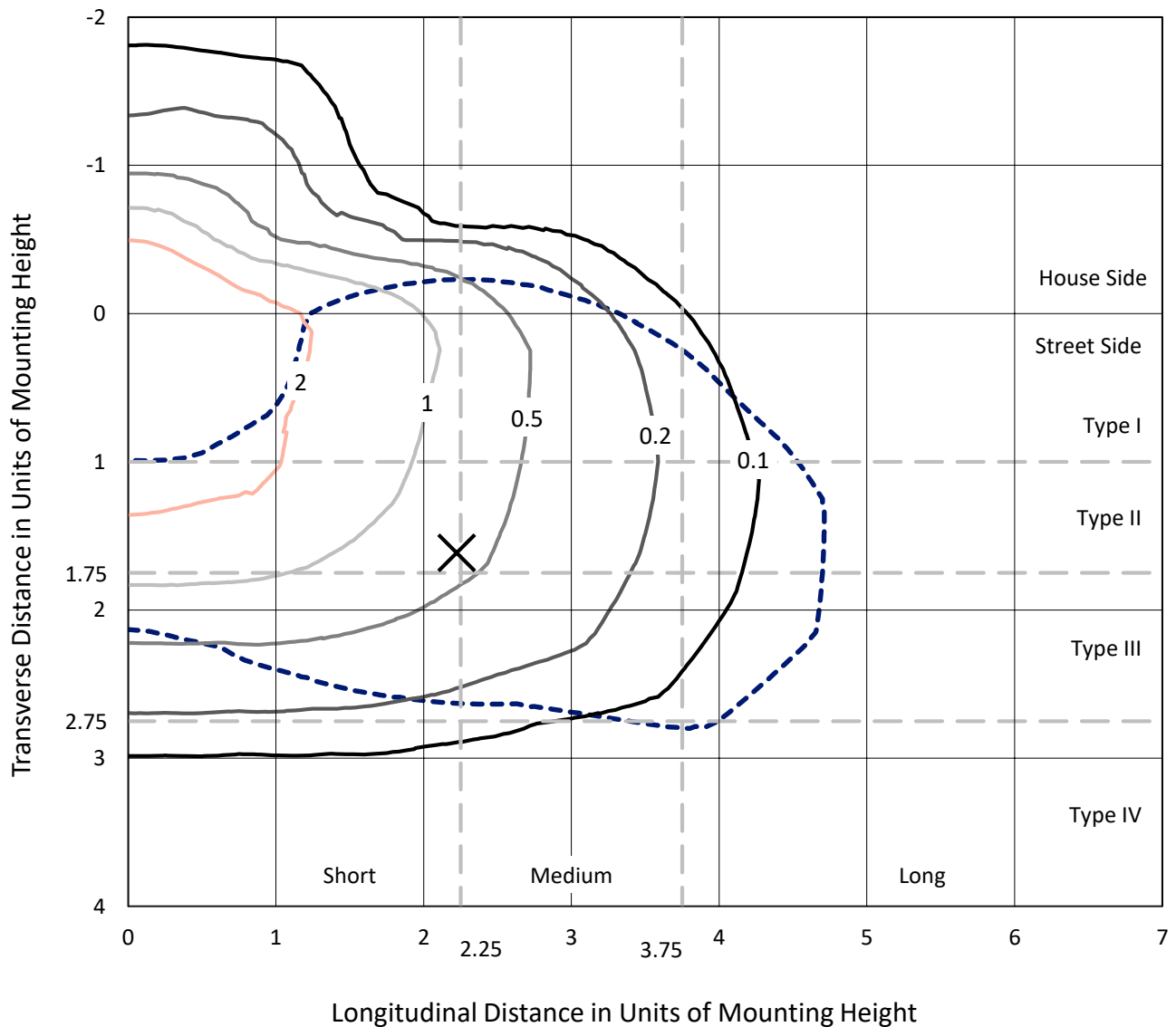
Input Watts (W): 21
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

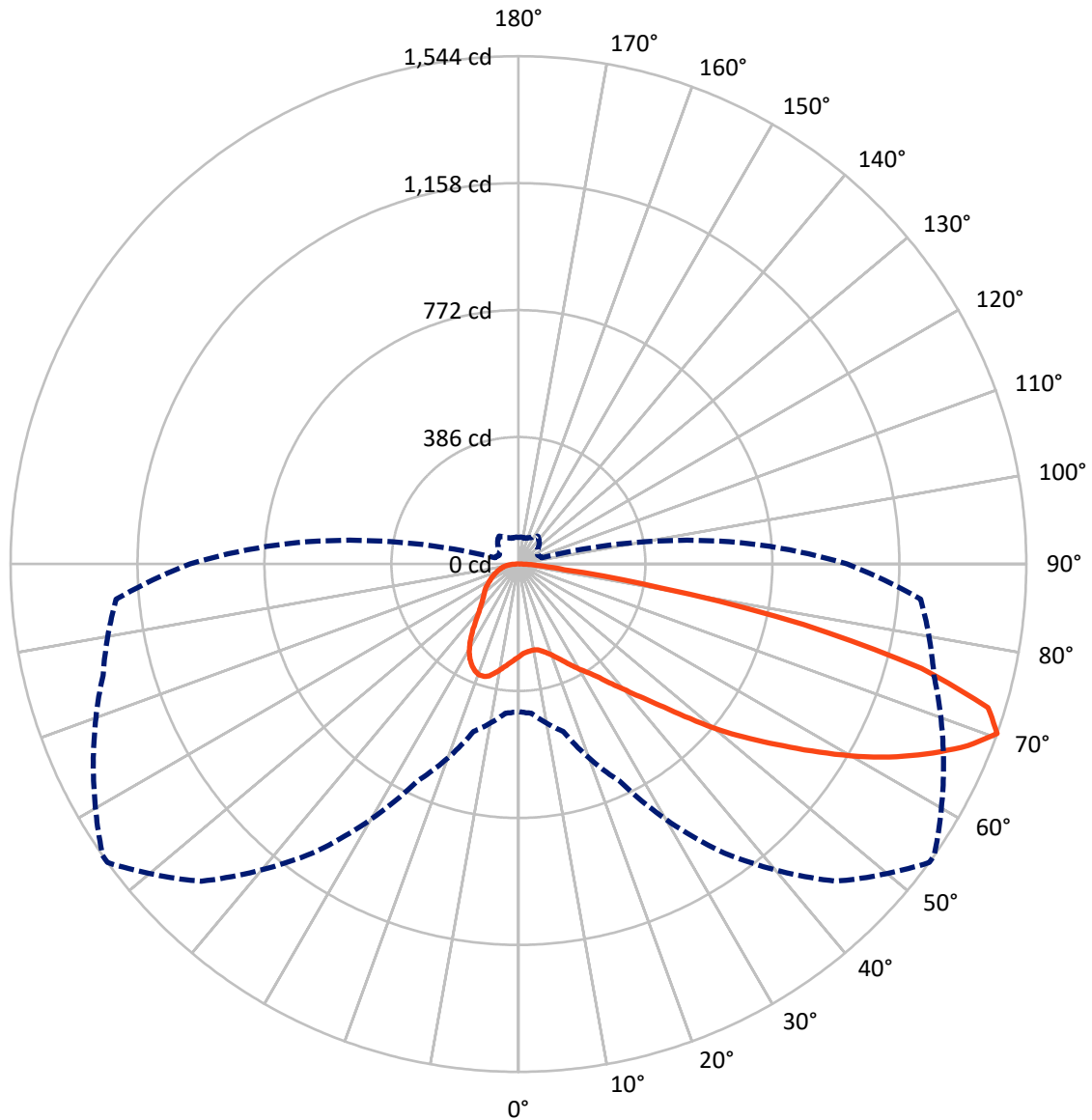
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.3 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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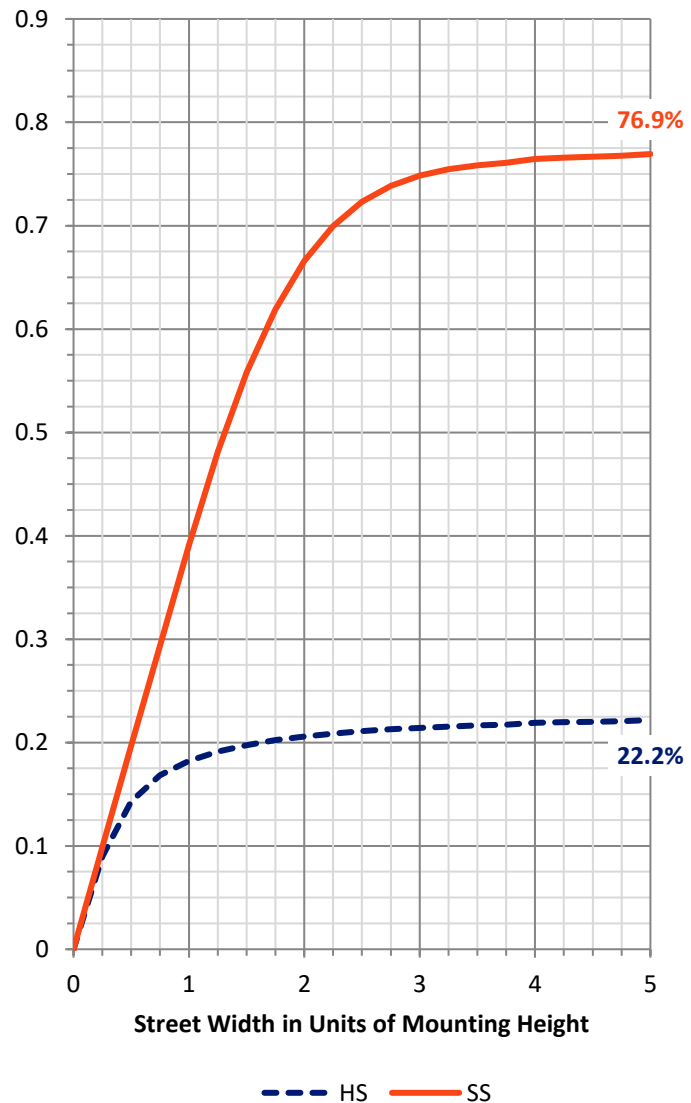
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	570.8	0.0	570.8
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	1946.1	0.0	1946.1
	% Fixture	77.3	0.0	77.3
Total	Lumens	2517.0	0.0	2517.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.6	1.1
10°-20°	88.3	3.5
20°-30°	153.4	6.1
30°-40°	224.2	8.9
40°-50°	351.9	14.0
50°-60°	541.1	21.5
60°-70°	661.1	26.3
70°-80°	409.9	16.3
80°-90°	59.5	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°	2517.0	100.0
0°-180°	2517.0	100.0



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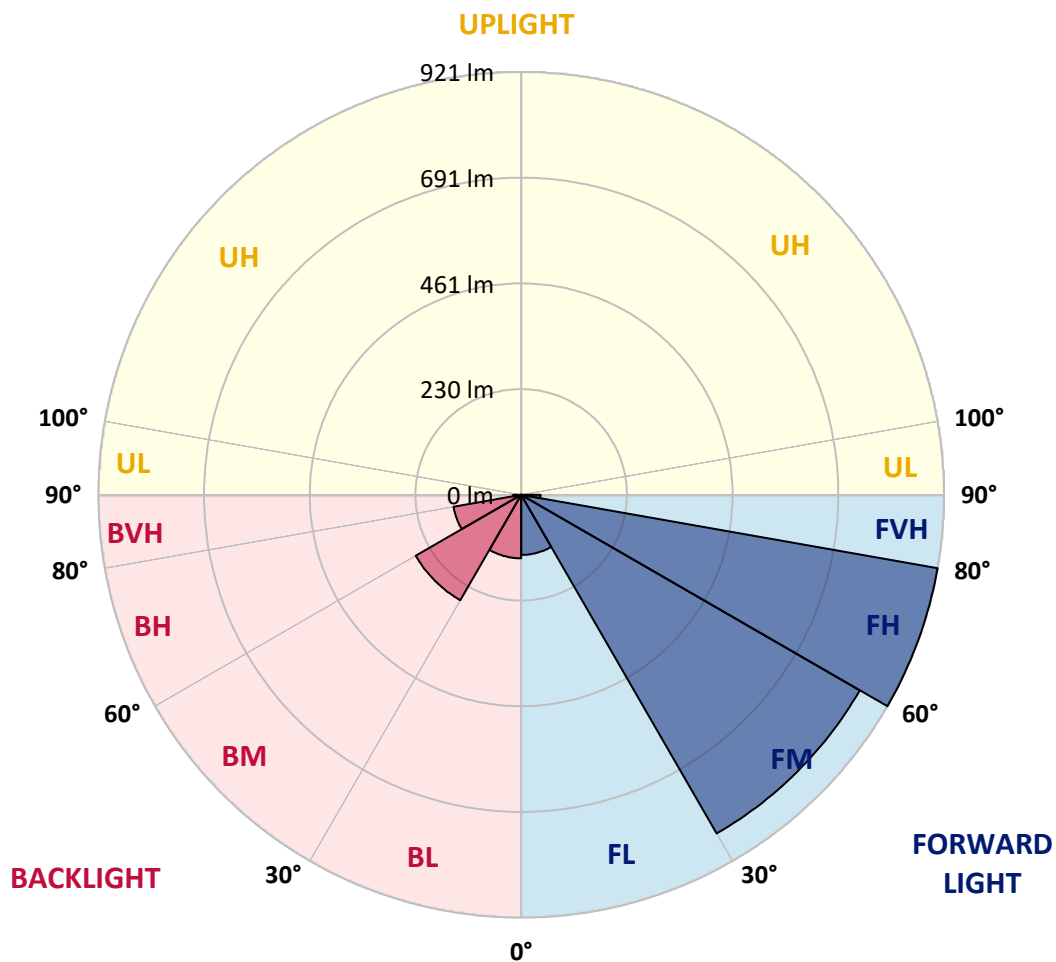
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	131.0	5.2			
FM	(30°-60°)	851.9	33.8			
FH	(60°-80°)	921.3	36.6			G1/1800
FVH	(80°-90°)	42.0	1.7			G1/100
BL	(0°-30°)	138.4	5.5	B1/500		
BM	(30°-60°)	265.3	10.5	B1/1000		
BH	(60°-80°)	149.7	5.9	B1/500		G1/500
BVH	(80°-90°)	17.5	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°	281.6	281.6	281.6	281.6	281.6	281.6	281.6	281.6	281.6	281.6	281.6
2.5°	270.5	269.6	269.6	271.0	271.5	272.8	272.8	273.3	274.7	277.0	279.8
5°	262.2	261.8	262.2	264.1	265.0	267.8	268.7	269.2	271.9	275.6	279.8
7.5°	253.9	253.5	254.4	257.2	259.9	264.1	266.4	266.9	271.0	276.1	281.6
10°	251.2	250.7	252.1	254.4	257.2	261.8	265.5	265.9	271.9	277.9	285.7
12.5°	254.9	254.4	255.8	258.1	260.9	264.1	268.2	268.7	276.5	284.4	292.7
15°	264.1	264.1	264.5	265.9	268.7	271.5	275.1	275.6	283.9	293.1	301.4
17.5°	278.4	277.5	277.5	277.0	278.8	280.2	284.8	285.3	294.0	302.3	310.6
20°	295.9	295.4	293.6	291.3	290.8	291.7	296.3	296.8	305.6	312.5	320.3
22.5°	317.1	317.6	313.4	308.3	306.0	307.4	311.6	312.0	318.5	324.5	331.4
25°	345.2	343.8	337.8	330.5	325.8	325.8	330.0	330.0	336.0	339.7	344.3
27.5°	371.9	369.2	363.6	353.0	345.7	347.0	351.2	351.2	356.7	358.1	360.4
30°	401.0	398.2	391.3	377.9	368.2	367.3	372.4	371.9	379.3	378.8	377.0
32.5°	436.5	435.1	423.6	406.5	393.6	390.4	395.0	395.4	400.0	398.7	392.7
35°	486.2	485.8	475.2	445.2	428.2	422.2	424.9	424.9	428.2	424.5	414.3
37.5°	548.9	549.8	540.6	496.4	472.4	462.3	462.7	462.3	463.2	459.0	448.4
40°	611.6	613.9	613.4	560.0	529.6	512.0	505.6	504.7	507.0	505.1	495.0
42.5°	694.1	699.6	686.7	638.3	604.2	574.7	557.2	554.9	560.0	562.3	552.6
45°	779.8	778.0	757.7	722.7	691.8	654.0	620.8	617.1	620.8	627.7	617.6
47.5°	824.5	823.1	818.1	800.6	796.0	752.6	702.4	699.2	692.3	701.9	689.9
50°	898.3	899.6	878.9	877.1	896.4	872.5	794.6	787.2	774.7	782.6	772.4
52.5°	951.7	945.7	932.8	949.0	1009.3	996.4	881.2	878.0	866.5	864.6	860.0
55°	973.4	973.4	975.7	1013.0	1099.2	1082.2	975.2	978.5	962.8	949.9	955.9
57.5°	979.8	982.6	1002.4	1064.2	1204.8	1149.0	1078.9	1083.5	1061.0	1035.2	1054.0
60°	948.0	956.3	1003.8	1093.2	1264.2	1220.0	1188.2	1189.5	1156.8	1119.0	1152.2
62.5°	866.5	876.6	961.4	1105.2	1254.5	1292.8	1291.4	1294.6	1249.9	1202.9	1244.4
65°	766.5	776.6	866.9	1071.6	1247.2	1344.9	1385.9	1394.6	1337.0	1273.9	1302.0
67.5°	619.4	632.8	718.5	958.2	1211.2	1387.7	1474.4	1483.6	1404.3	1310.8	1296.9
70°	448.9	455.4	527.3	728.2	1064.6	1364.2	1544.4	1544.0	1426.4	1308.0	1227.8
72.5°	216.2	221.2	283.4	452.1	761.4	1157.7	1493.7	1502.5	1396.0	1267.9	1069.7
75°	89.0	94.0	114.8	190.8	399.6	765.1	1266.1	1286.8	1267.9	1137.9	837.0
77.5°	55.3	57.1	67.3	98.6	182.5	357.2	886.3	914.4	1004.7	911.6	552.6
80°	41.5	42.9	50.2	69.1	115.2	131.8	440.1	475.6	608.8	523.1	250.3
82.5°	34.6	35.0	40.1	50.2	78.4	75.6	141.0	157.2	283.9	199.6	86.2
85°	32.3	33.2	35.9	35.9	49.8	47.5	58.5	61.3	82.5	68.2	30.0
87.5°	16.6	15.7	31.8	28.1	25.8	23.0	24.9	26.7	30.9	32.7	13.4
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°	281.6	281.6	281.6	281.6	281.6	281.6	281.6	281.6	281.6	281.6	281.6
2.5°	280.7	282.1	284.4	286.7	289.4	292.7	294.5	296.8	298.7	297.7	297.3
5°	282.1	284.4	289.4	294.0	299.6	306.0	310.2	314.8	318.5	319.4	318.0
7.5°	284.4	288.5	295.4	303.7	311.1	319.4	325.8	332.3	336.9	337.8	337.8
10°	289.9	294.5	303.7	314.8	323.5	332.3	339.7	344.7	348.9	350.7	350.7
12.5°	297.7	303.3	314.3	327.7	337.4	345.7	349.8	352.1	354.0	355.8	356.3
15°	307.0	312.9	326.3	340.6	350.7	354.9	354.9	354.4	354.4	355.3	356.3
17.5°	316.2	322.6	336.4	351.7	358.1	355.8	352.6	351.2	350.3	349.8	351.2
20°	325.8	332.3	346.1	360.4	358.6	348.9	344.3	341.1	338.3	336.9	338.8
22.5°	336.4	342.4	356.7	366.4	352.6	337.8	329.1	324.0	319.4	316.6	318.5
25°	348.9	354.9	368.7	368.2	342.0	321.2	307.4	299.1	294.0	291.3	291.3
27.5°	363.6	368.7	382.1	363.6	327.2	299.1	278.8	271.0	269.6	267.3	267.3
30°	378.8	383.0	394.5	353.0	307.0	270.1	248.0	244.3	244.7	242.4	242.9
32.5°	394.5	398.7	401.9	337.4	280.7	237.4	222.6	219.8	219.4	217.5	215.7
35°	416.6	422.6	402.8	316.2	248.9	210.2	199.6	196.8	194.0	187.6	187.6
37.5°	450.3	456.7	400.5	289.9	216.2	189.0	179.3	175.6	171.0	164.5	162.2
40°	496.4	496.4	395.4	260.4	189.9	171.9	162.7	158.1	153.0	146.6	145.2
42.5°	550.8	537.9	387.6	230.4	170.5	160.4	152.1	147.0	141.0	133.7	132.7
45°	614.4	579.3	376.5	203.7	156.2	153.5	148.4	139.6	129.5	121.7	120.3
47.5°	676.1	616.7	365.9	184.8	144.3	150.7	146.6	131.8	118.0	106.9	105.5
50°	743.9	649.8	353.5	169.1	135.0	148.9	144.3	120.3	105.1	97.2	96.3
52.5°	811.6	683.5	340.1	152.6	127.2	145.2	138.7	112.0	104.6	94.0	92.6
55°	883.1	722.7	324.5	134.1	118.0	137.8	131.4	111.5	107.8	94.0	90.8
57.5°	952.7	766.0	299.1	116.1	107.8	126.7	128.6	108.8	100.9	93.1	89.4
60°	1029.6	812.1	257.2	100.9	99.1	117.5	124.9	102.8	93.1	90.3	88.5
62.5°	1091.4	853.6	200.9	90.3	91.7	110.2	120.3	99.1	89.9	87.6	87.1
65°	1118.1	854.5	144.3	81.1	84.3	103.2	115.7	95.9	87.1	86.2	85.7
67.5°	1090.0	807.5	101.4	72.4	76.5	96.8	109.7	92.6	84.3	84.8	83.9
70°	999.2	708.4	74.2	64.1	69.1	89.9	103.2	88.5	81.1	82.0	80.7
72.5°	836.0	552.1	59.5	57.1	63.1	82.5	96.8	83.9	76.0	76.5	73.7
75°	617.6	365.9	49.8	51.2	56.2	75.6	88.5	77.9	70.5	68.7	66.8
77.5°	367.3	188.0	41.0	44.7	50.2	67.3	79.3	70.5	64.5	61.3	59.9
80°	151.6	76.0	33.6	37.8	43.8	59.9	70.1	61.8	57.6	54.4	52.5
82.5°	60.4	37.3	26.7	30.9	36.9	52.1	61.3	54.4	50.2	47.9	42.9
85°	23.0	18.4	18.0	21.7	27.7	40.1	50.7	45.6	42.4	36.4	35.0
87.5°	9.2	8.3	8.3	10.6	15.7	25.3	36.4	31.8	33.2	26.3	26.7
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)