

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: P265921

Luminaire Tested: **ARCH-AF24-20-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265921
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
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-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1739.2 lumens
Efficiency: N/A
Efficacy: 82.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 21
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

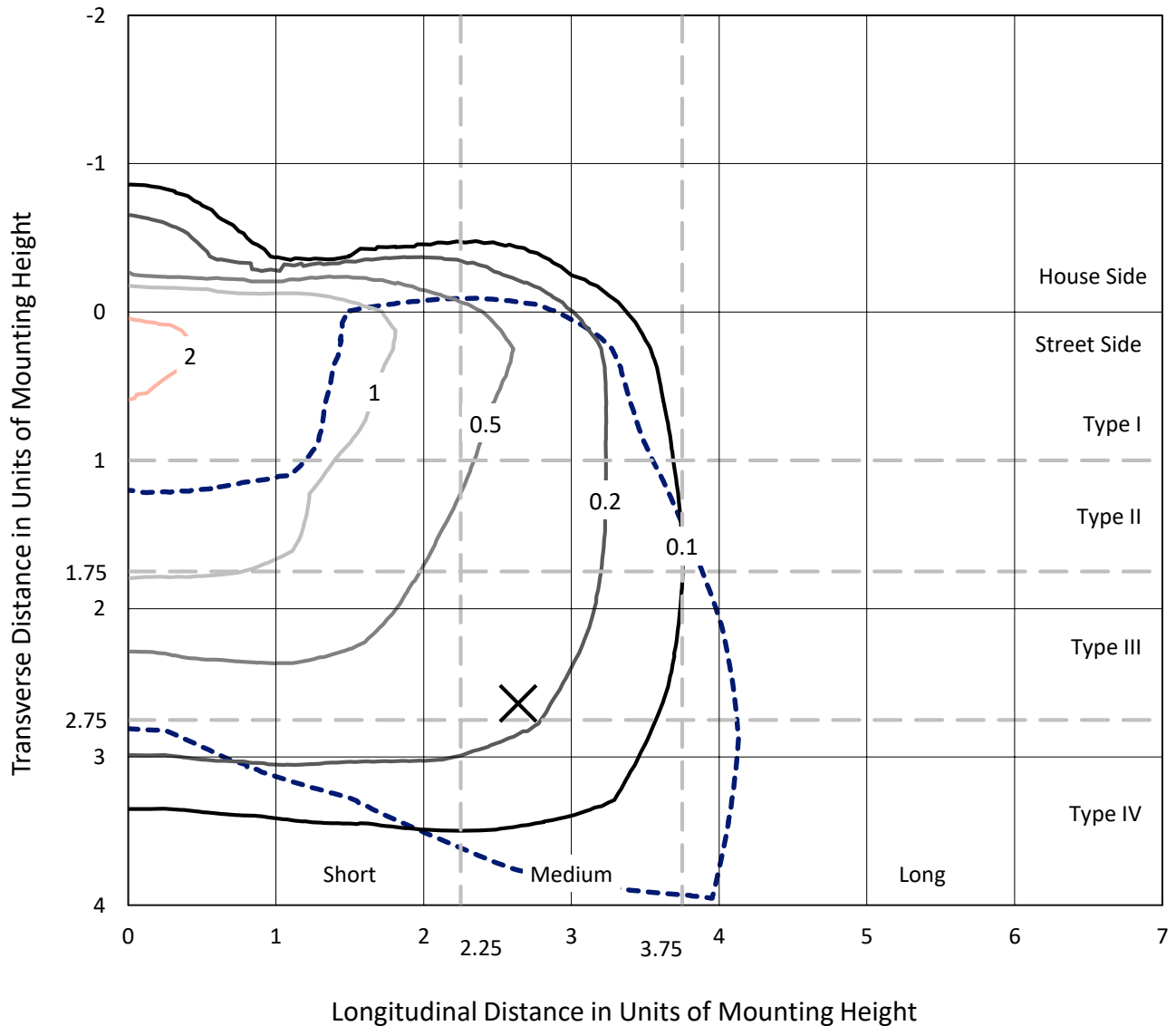


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

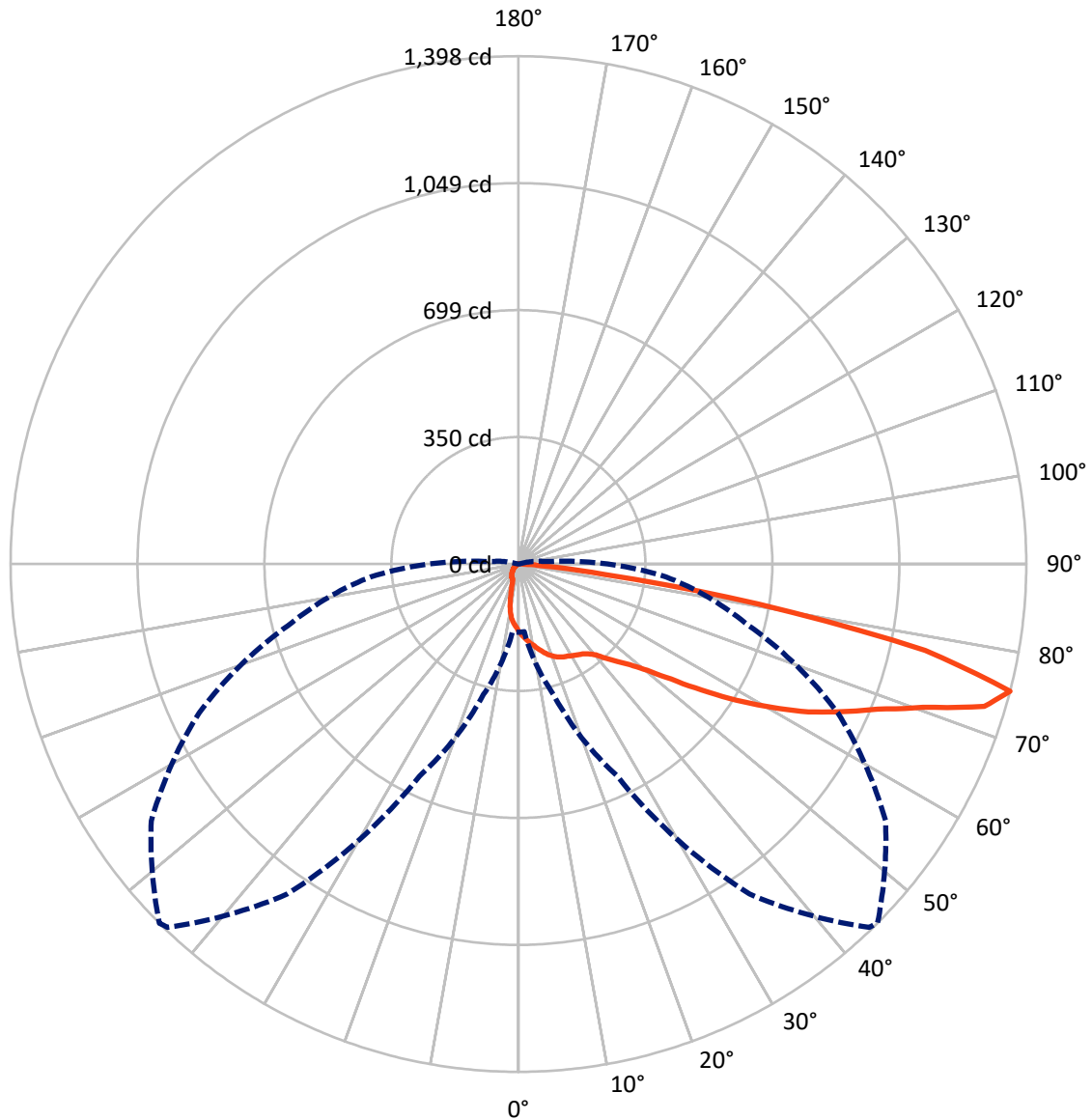


Based on 10 foot mounting height. Maximum calculated value = 2.5 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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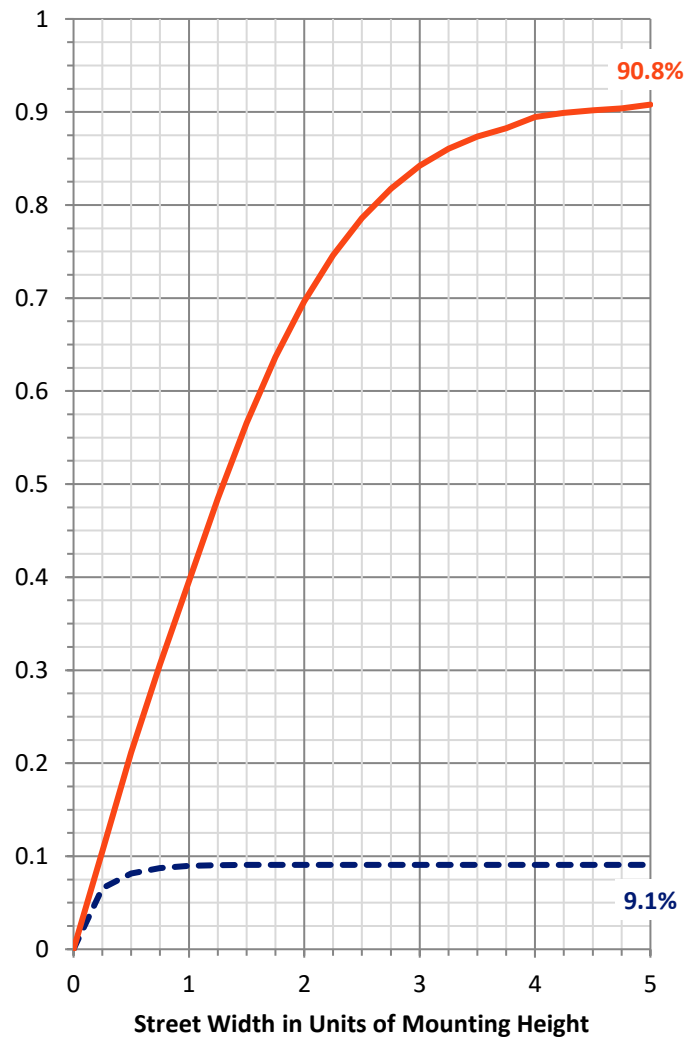
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	159.1	0.0	159.1
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	1580.1	0.0	1580.1
	% Fixture	90.9	0.0	90.9
Total	Lumens	1739.2	0.0	1739.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.6	1.0
10°-20°	49.7	2.9
20°-30°	82.4	4.7
30°-40°	119.2	6.9
40°-50°	195.2	11.2
50°-60°	347.8	20.0
60°-70°	511.3	29.4
70°-80°	385.7	22.2
80°-90°	30.3	1.7
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°	1739.2	100.0
0°-180°	1739.2	100.0



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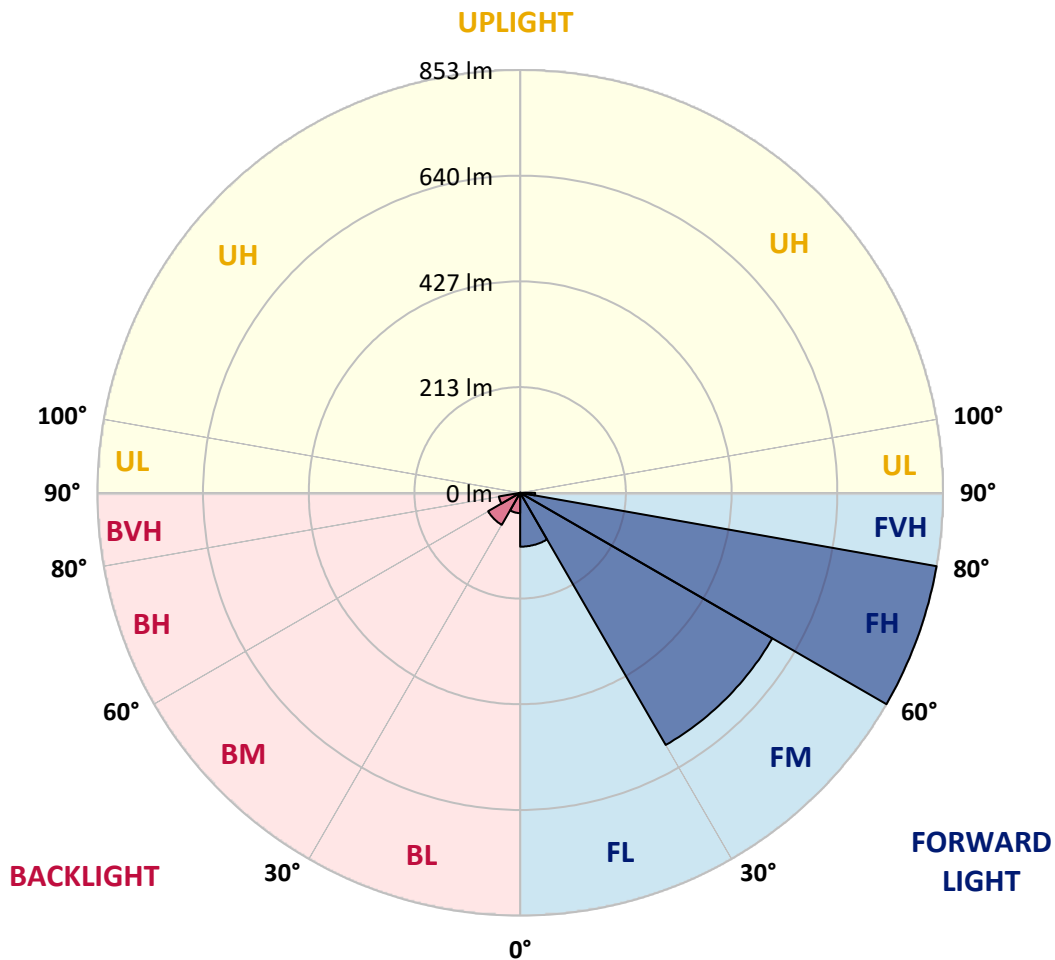
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	108.8	6.3			
FM	(30°-60°)	587.7	33.8			
FH	(60°-80°)	853.5	49.1			G1/1800
FVH	(80°-90°)	30.2	1.7			G1/100
BL	(0°-30°)	40.9	2.4	B0/110		
BM	(30°-60°)	74.5	4.3	B0/220		
BH	(60°-80°)	43.6	2.5	B0/110		G0/110
BVH	(80°-90°)	0.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	185.9	185.9	185.9	185.9	185.9	185.9	185.9	185.9	185.9	185.9	185.9
2.5°	202.1	202.1	201.7	201.2	199.2	197.1	196.6	195.6	191.8	189.4	186.8
5°	218.9	219.4	218.5	216.5	211.9	207.4	207.0	203.7	196.6	191.8	186.4
7.5°	234.9	235.9	233.7	230.1	224.7	218.1	217.7	211.6	202.5	195.6	187.7
10°	248.7	248.7	245.6	241.1	235.4	228.3	227.6	220.5	210.4	201.7	191.3
12.5°	263.5	262.9	258.8	252.8	246.0	239.5	239.0	230.4	220.5	209.5	196.6
15°	276.9	276.1	270.7	265.0	258.1	251.0	250.6	242.1	231.8	218.5	204.5
17.5°	284.4	284.0	279.1	273.3	267.4	262.1	261.8	252.8	241.6	228.0	212.4
20°	285.7	286.0	281.9	276.9	273.7	270.7	270.7	262.6	250.6	236.3	220.5
22.5°	286.0	287.3	284.4	277.8	276.9	277.3	278.1	271.6	259.3	245.6	229.2
25°	289.0	290.5	288.4	280.7	279.8	282.7	283.5	280.7	269.5	255.9	239.0
27.5°	294.6	296.4	294.6	284.9	283.5	286.4	287.3	289.0	280.7	265.9	249.4
30°	306.2	306.6	302.9	290.5	288.0	291.8	292.9	297.6	291.0	275.3	259.3
32.5°	326.4	322.2	311.2	294.6	292.6	296.7	298.0	302.9	300.5	284.4	269.5
35°	367.4	346.0	320.5	300.5	298.3	302.5	304.2	311.2	312.4	297.1	282.2
37.5°	367.0	347.7	342.9	311.5	308.7	311.5	313.6	322.2	327.2	314.0	300.8
40°	393.0	384.7	384.7	332.6	323.1	327.2	329.1	337.9	346.6	336.2	322.6
42.5°	474.6	469.2	463.3	372.8	343.2	354.7	356.0	361.3	371.5	368.3	352.2
45°	565.5	560.5	538.3	441.2	377.7	379.9	382.8	391.4	406.3	412.3	393.5
47.5°	636.7	631.7	612.7	523.5	431.6	413.6	413.6	430.5	453.6	469.2	451.0
50°	693.9	688.1	676.6	611.1	520.2	462.2	459.8	479.4	513.7	537.8	525.6
52.5°	749.5	732.6	725.6	701.7	620.2	532.5	526.0	539.9	587.2	617.3	607.1
55°	786.5	784.0	776.6	784.8	725.1	618.2	612.4	615.2	674.4	694.7	682.0
57.5°	821.1	820.6	837.1	875.4	839.6	716.0	707.1	702.6	758.9	753.9	765.0
60°	863.8	856.4	894.7	949.4	944.5	811.6	801.3	792.2	823.4	809.6	864.7
62.5°	865.8	863.8	941.7	1020.3	1048.6	908.6	896.8	864.2	879.9	863.8	959.7
65°	787.3	797.5	961.4	1057.7	1135.8	993.9	979.4	928.8	930.0	919.3	1071.7
67.5°	769.6	774.9	907.0	1098.0	1198.8	1079.9	1066.3	1003.3	988.6	989.4	1138.0
70°	725.6	733.7	839.6	1095.2	1248.6	1194.7	1181.1	1112.8	1077.0	1037.1	1086.9
72.5°	554.3	568.4	707.4	960.1	1235.0	1344.9	1341.2	1251.5	1112.5	952.4	822.3
75°	187.7	187.2	371.5	644.9	1109.4	1390.9	1398.4	1234.2	970.3	656.8	408.2
77.5°	40.3	40.8	76.5	261.3	737.1	1117.0	1145.2	931.0	625.9	292.6	93.5
80°	19.8	20.1	31.7	69.1	294.6	626.4	670.9	478.5	231.3	58.4	15.6
82.5°	9.9	10.3	16.4	36.7	109.1	222.6	238.0	176.2	66.3	32.9	7.8
85°	3.8	3.8	8.3	21.7	49.8	52.3	64.1	51.1	40.0	26.8	2.1
87.5°	0.8	0.8	4.5	10.7	22.2	16.4	16.4	15.6	24.3	18.1	0.8
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°	185.9	185.9	185.9	185.9	185.9	185.9	185.9	185.9	185.9	185.9	185.9
2.5°	185.6	184.0	181.1	178.3	176.2	173.6	172.5	171.1	170.8	170.4	171.1
5°	183.6	181.1	175.7	171.1	167.1	163.9	161.3	158.9	157.7	156.8	157.3
7.5°	183.6	179.8	172.0	165.0	158.5	151.5	144.4	139.1	134.9	132.5	132.9
10°	185.6	180.6	170.4	160.8	148.6	133.8	118.5	107.0	99.3	94.6	94.6
12.5°	190.1	183.6	170.8	155.9	134.9	109.1	86.0	72.0	66.3	63.1	63.4
15°	196.3	188.5	172.8	149.4	116.1	81.0	60.0	51.1	51.1	51.8	52.3
17.5°	203.2	194.7	174.5	139.4	91.7	58.0	47.3	46.5	47.7	49.8	49.8
20°	210.4	200.9	175.3	123.8	68.7	46.2	44.8	44.8	45.6	47.7	48.1
22.5°	218.9	208.6	174.5	104.6	51.5	43.6	43.2	43.2	43.2	45.6	45.6
25°	228.0	217.7	171.1	83.9	43.6	42.0	41.5	41.1	41.1	43.2	43.6
27.5°	238.3	227.2	163.4	64.1	41.1	40.3	40.0	39.0	39.0	40.8	40.8
30°	248.7	238.0	151.5	48.6	39.0	38.6	37.9	37.0	36.2	37.9	37.9
32.5°	259.7	249.0	135.9	38.6	36.2	36.2	35.8	34.6	33.7	34.6	34.9
35°	274.5	261.8	118.0	33.7	32.5	32.5	32.5	32.1	30.5	31.4	31.4
37.5°	294.3	279.5	97.6	31.4	29.6	28.8	28.8	28.8	27.6	27.9	27.9
40°	319.3	300.0	77.8	29.3	27.6	25.5	24.8	25.2	24.3	24.3	23.9
42.5°	353.6	322.2	58.4	27.6	26.0	23.0	21.4	21.0	20.1	19.8	19.8
45°	402.5	349.4	42.0	26.0	24.8	20.1	18.5	17.2	15.2	14.1	14.1
47.5°	466.0	380.3	31.4	24.3	23.4	17.6	15.6	13.1	10.3	9.4	9.4
50°	543.3	414.8	26.3	21.7	21.4	15.6	12.3	8.7	5.7	4.9	5.4
52.5°	618.6	447.4	23.4	19.4	19.0	13.6	9.1	4.5	2.4	2.4	2.4
55°	682.0	470.4	21.4	17.2	16.4	10.7	4.9	2.1	1.3	1.3	1.3
57.5°	739.1	483.6	19.4	15.2	13.1	7.4	2.1	0.8	0.8	0.4	0.4
60°	791.3	491.4	16.9	13.1	10.3	4.1	0.8	0.4	0.4	0.0	0.0
62.5°	842.8	497.1	14.5	10.7	7.8	1.6	0.4	0.4	0.0	0.0	0.0
65°	882.0	495.1	11.5	8.7	4.9	0.8	0.4	0.0	0.0	0.0	0.0
67.5°	880.7	467.1	8.7	6.6	2.4	0.4	0.0	0.0	0.0	0.0	0.0
70°	787.6	393.5	5.7	4.1	0.8	0.4	0.0	0.0	0.0	0.0	0.0
72.5°	558.8	252.2	3.8	2.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	246.0	76.5	2.1	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	48.1	17.6	1.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	11.5	2.1	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	4.9	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)