

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: P214923

Luminaire Tested: **ARCH-AF24-20-D-U-T4W-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214923
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-7030-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 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: 1772 lumens
Efficiency: N/A
Efficacy: 84.4 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 (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

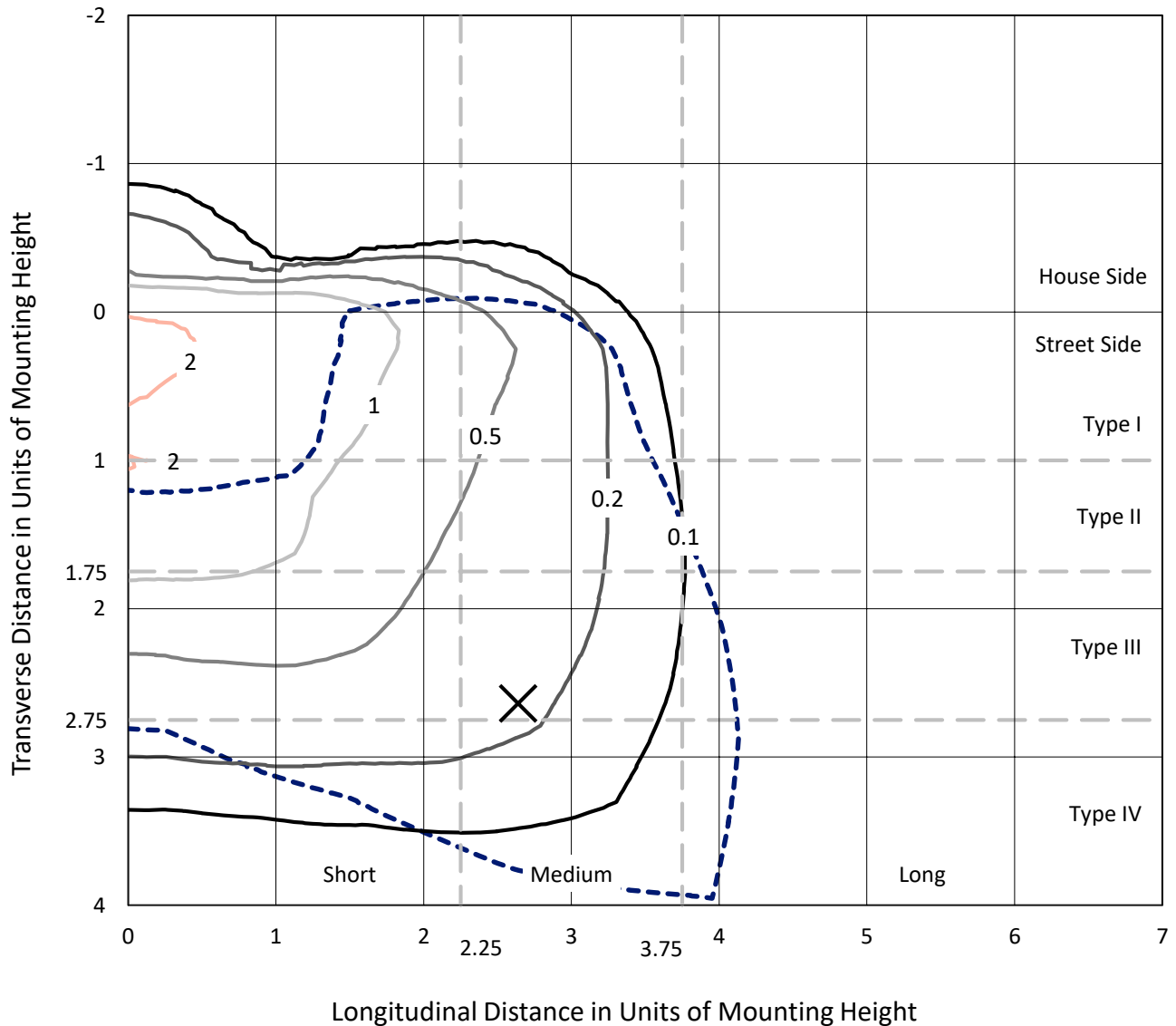


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

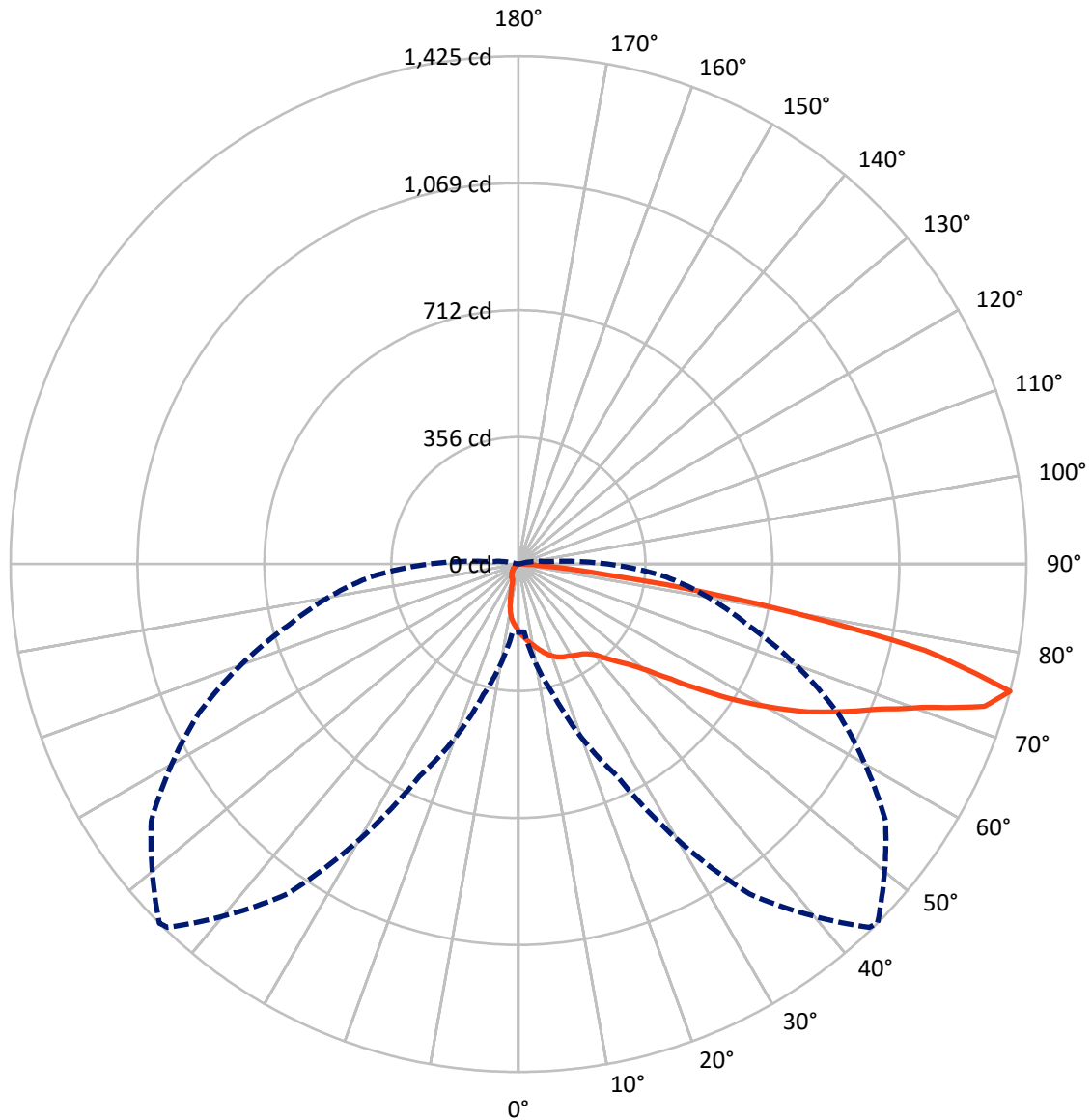


Based on 10 foot mounting height. Maximum calculated value = 2.5 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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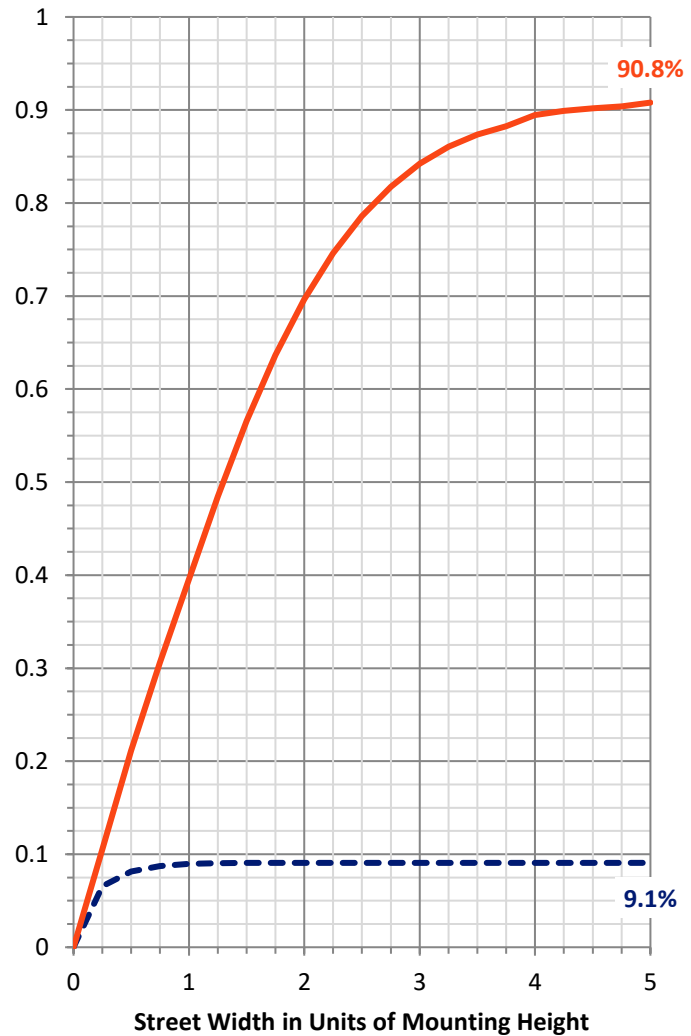
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	162.1	0.0	162.1
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	1609.9	0.0	1609.9
	% Fixture	90.9	0.0	90.9
Total	Lumens	1772.0	0.0	1772.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.9	1.0
10°-20°	50.7	2.9
20°-30°	83.9	4.7
30°-40°	121.5	6.9
40°-50°	198.9	11.2
50°-60°	354.4	20.0
60°-70°	521.0	29.4
70°-80°	393.0	22.2
80°-90°	30.8	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°	1772.0	100.0
0°-180°	1772.0	100.0



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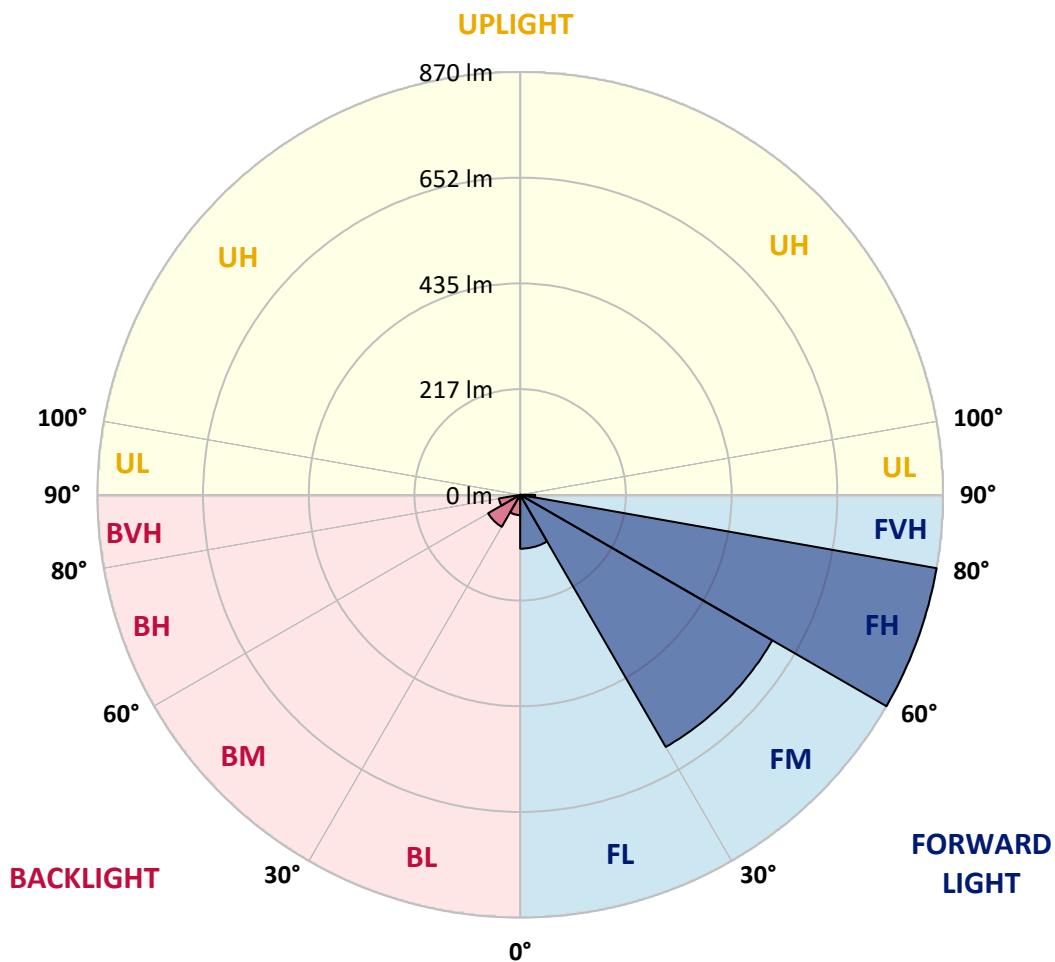
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	110.8	6.3			
FM	(30°-60°)	598.8	33.8			
FH	(60°-80°)	869.6	49.1			G1/1800
FVH	(80°-90°)	30.7	1.7			G1/100
BL	(0°-30°)	41.6	2.4	B0/110		
BM	(30°-60°)	76.0	4.3	B0/220		
BH	(60°-80°)	44.4	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°	189.5	189.5	189.5	189.5	189.5	189.5	189.5	189.5	189.5	189.5	189.5
2.5°	205.9	205.9	205.5	205.0	202.9	200.8	200.4	199.2	195.4	192.9	190.4
5°	223.1	223.5	222.6	220.6	215.9	211.3	210.9	207.6	200.4	195.4	189.9
7.5°	239.4	240.3	238.2	234.4	228.9	222.2	221.8	215.5	206.3	199.2	191.2
10°	253.3	253.3	250.3	245.7	239.8	232.7	231.9	224.7	214.3	205.5	195.0
12.5°	268.4	267.9	263.7	257.5	250.7	244.0	243.6	234.8	224.7	213.4	200.4
15°	282.2	281.4	275.9	270.0	262.9	255.8	255.4	246.6	236.1	222.6	208.4
17.5°	289.7	289.3	284.3	278.4	272.5	267.1	266.7	257.5	246.1	232.3	216.4
20°	291.0	291.4	287.2	282.2	278.8	275.9	275.9	267.5	255.4	240.7	224.7
22.5°	291.4	292.7	289.7	283.0	282.2	282.6	283.4	276.7	264.2	250.3	233.6
25°	294.4	296.0	293.9	286.0	285.1	288.1	288.9	286.0	274.6	260.8	243.6
27.5°	300.2	301.9	300.2	290.2	288.9	291.8	292.7	294.4	286.0	270.9	254.1
30°	312.0	312.4	308.6	296.0	293.5	297.3	298.5	303.2	296.4	280.5	264.2
32.5°	332.5	328.3	317.0	300.2	298.1	302.3	303.6	308.6	306.1	289.7	274.6
35°	374.4	352.6	326.6	306.1	304.0	308.2	309.9	317.0	318.3	302.7	287.6
37.5°	374.0	354.3	349.3	317.4	314.5	317.4	319.5	328.3	333.3	319.9	306.5
40°	400.4	392.0	392.0	338.8	329.2	333.3	335.4	344.2	353.1	342.6	328.7
42.5°	483.5	478.0	472.1	379.9	349.7	361.4	362.7	368.1	378.6	375.3	358.9
45°	576.1	571.1	548.4	449.5	384.9	387.0	390.0	398.8	413.9	420.1	400.9
47.5°	648.7	643.6	624.3	533.4	439.8	421.4	421.4	438.6	462.1	478.0	459.6
50°	706.9	701.1	689.3	622.7	530.0	470.9	468.4	488.5	523.3	548.0	535.5
52.5°	763.6	746.4	739.2	714.9	631.9	542.6	535.9	550.1	598.3	629.0	618.5
55°	801.3	798.8	791.2	799.6	738.8	629.8	623.9	626.9	687.2	707.8	694.8
57.5°	836.5	836.1	852.9	891.9	855.4	729.6	720.4	715.8	773.2	768.2	779.5
60°	880.1	872.6	911.6	967.3	962.3	826.9	816.4	807.2	839.0	824.8	881.0
62.5°	882.2	880.1	959.4	1039.5	1068.4	925.8	913.7	880.5	896.5	880.1	977.8
65°	802.1	812.6	979.5	1077.6	1157.3	1012.6	997.9	946.4	947.6	936.7	1091.9
67.5°	784.1	789.5	924.1	1118.7	1221.4	1100.3	1086.4	1022.3	1007.2	1008.0	1159.4
70°	739.2	747.6	855.4	1115.8	1272.2	1217.2	1203.4	1133.8	1097.3	1056.6	1107.4
72.5°	564.8	579.1	720.8	978.2	1258.3	1370.3	1366.5	1275.1	1133.4	970.3	837.8
75°	191.2	190.8	378.6	657.0	1130.4	1417.2	1424.8	1257.5	988.7	669.2	415.9
77.5°	41.1	41.5	78.0	266.3	751.0	1138.0	1166.9	948.5	637.8	298.1	95.2
80°	20.1	20.5	32.3	70.4	300.2	638.2	683.5	487.6	235.6	59.5	15.9
82.5°	10.1	10.5	16.8	37.3	111.1	226.8	242.4	179.5	67.5	33.5	8.0
85°	3.8	3.8	8.4	22.2	50.7	53.3	65.4	52.0	40.7	27.3	2.1
87.5°	0.8	0.8	4.6	10.9	22.6	16.8	16.8	15.9	24.7	18.4	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°	189.5	189.5	189.5	189.5	189.5	189.5	189.5	189.5	189.5	189.5	189.5
2.5°	189.1	187.4	184.5	181.6	179.5	176.9	175.7	174.4	174.0	173.6	174.4
5°	187.0	184.5	179.0	174.4	170.2	166.9	164.4	161.9	160.6	159.8	160.2
7.5°	187.0	183.2	175.3	168.1	161.4	154.3	147.2	141.7	137.5	135.0	135.4
10°	189.1	184.1	173.6	163.9	151.4	136.3	120.8	109.0	101.1	96.4	96.4
12.5°	193.7	187.0	174.0	158.9	137.5	111.1	87.6	73.4	67.5	64.2	64.6
15°	200.0	192.0	176.1	152.2	118.2	82.6	61.2	52.0	52.0	52.8	53.3
17.5°	207.1	198.3	177.8	142.1	93.5	59.1	48.2	47.4	48.6	50.7	50.7
20°	214.3	204.6	178.6	126.2	70.0	47.0	45.7	45.7	46.5	48.6	49.1
22.5°	223.1	212.6	177.8	106.5	52.4	44.4	44.0	44.0	44.0	46.5	46.5
25°	232.3	221.8	174.4	85.5	44.4	42.8	42.3	41.9	41.9	44.0	44.4
27.5°	242.8	231.5	166.5	65.4	41.9	41.1	40.7	39.8	39.8	41.5	41.5
30°	253.3	242.4	154.3	49.5	39.8	39.4	38.6	37.7	36.9	38.6	38.6
32.5°	264.6	253.7	138.4	39.4	36.9	36.9	36.5	35.2	34.4	35.2	35.6
35°	279.7	266.7	120.3	34.4	33.1	33.1	33.1	32.7	31.0	31.9	31.9
37.5°	299.8	284.7	99.4	31.9	30.2	29.4	29.4	29.4	28.1	28.5	28.5
40°	325.4	305.7	79.2	29.8	28.1	26.0	25.2	25.6	24.7	24.7	24.3
42.5°	360.2	328.3	59.5	28.1	26.4	23.5	21.8	21.4	20.5	20.1	20.1
45°	410.1	356.0	42.8	26.4	25.2	20.5	18.9	17.6	15.5	14.3	14.3
47.5°	474.7	387.4	31.9	24.7	23.9	18.0	15.9	13.4	10.5	9.6	9.6
50°	553.5	422.7	26.8	22.2	21.8	15.9	12.6	8.8	5.9	5.0	5.5
52.5°	630.2	455.8	23.9	19.7	19.3	13.8	9.2	4.6	2.5	2.5	2.5
55°	694.8	479.3	21.8	17.6	16.8	10.9	5.0	2.1	1.3	1.3	1.3
57.5°	753.1	492.7	19.7	15.5	13.4	7.5	2.1	0.8	0.8	0.4	0.4
60°	806.3	500.6	17.2	13.4	10.5	4.2	0.8	0.4	0.4	0.0	0.0
62.5°	858.7	506.5	14.7	10.9	8.0	1.7	0.4	0.4	0.0	0.0	0.0
65°	898.6	504.4	11.7	8.8	5.0	0.8	0.4	0.0	0.0	0.0	0.0
67.5°	897.3	475.9	8.8	6.7	2.5	0.4	0.0	0.0	0.0	0.0	0.0
70°	802.5	400.9	5.9	4.2	0.8	0.4	0.0	0.0	0.0	0.0	0.0
72.5°	569.4	257.0	3.8	2.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	250.7	78.0	2.1	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	49.1	18.0	1.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	11.7	2.1	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	5.0	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)