

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: P214924

Luminaire Tested: **ARCH-AF24-30-D-U-T4W-7030-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214924  
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-AF24-30-D-U-T4W-7030-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 375mA 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: 2481 lumens  
Efficiency: N/A  
Efficacy: 80.0 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): 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

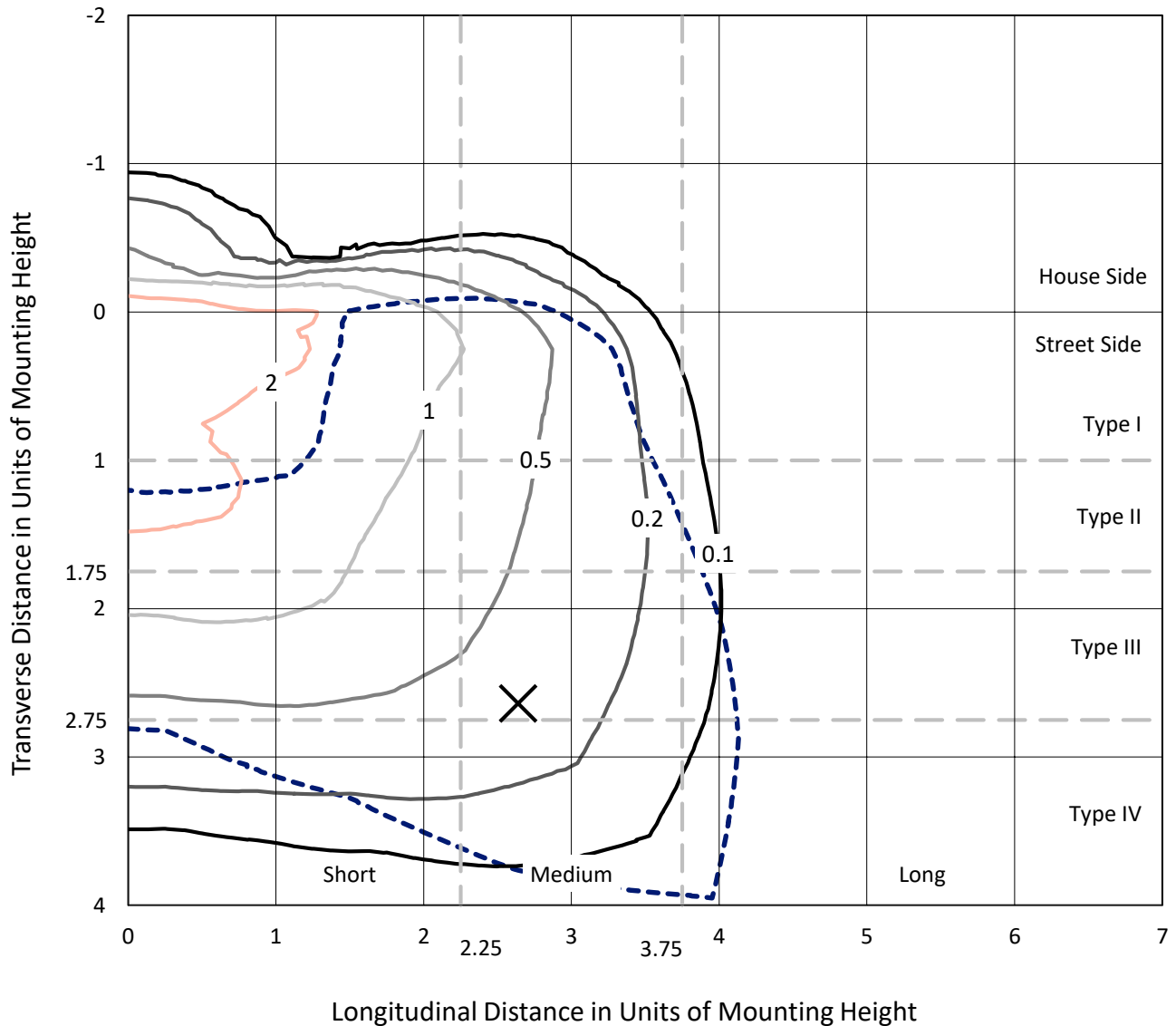


REPORT NUMBER: P214924

CATALOG NUMBER: ARCH-AF24-30-D-U-T4W-7030-HSS

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

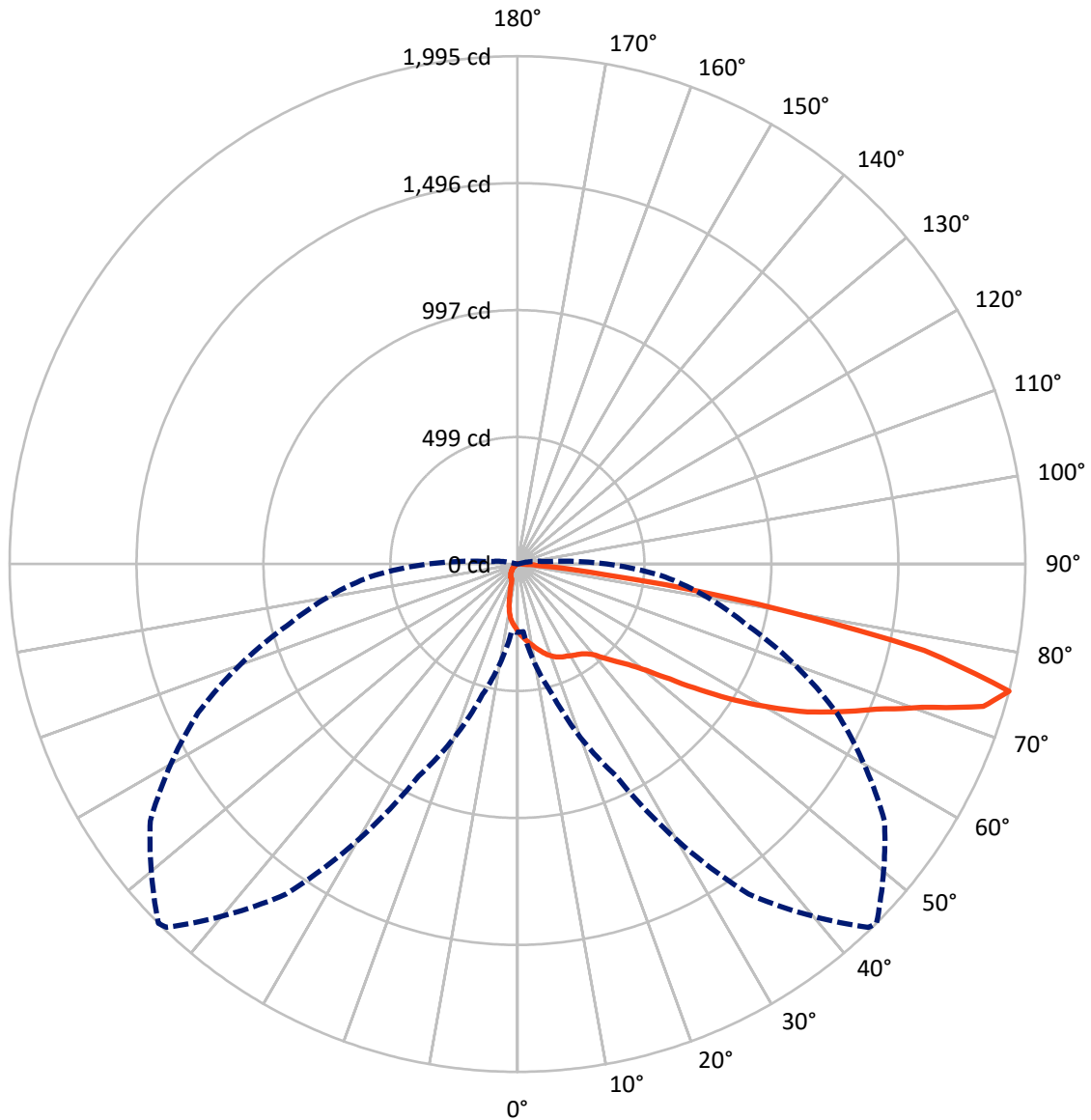


Based on 10 foot mounting height. Maximum calculated value = 3.5 fc  
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P214924

CATALOG NUMBER: ARCH-AF24-30-D-U-T4W-7030-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P214924

CATALOG NUMBER: ARCH-AF24-30-D-U-T4W-7030-HSS

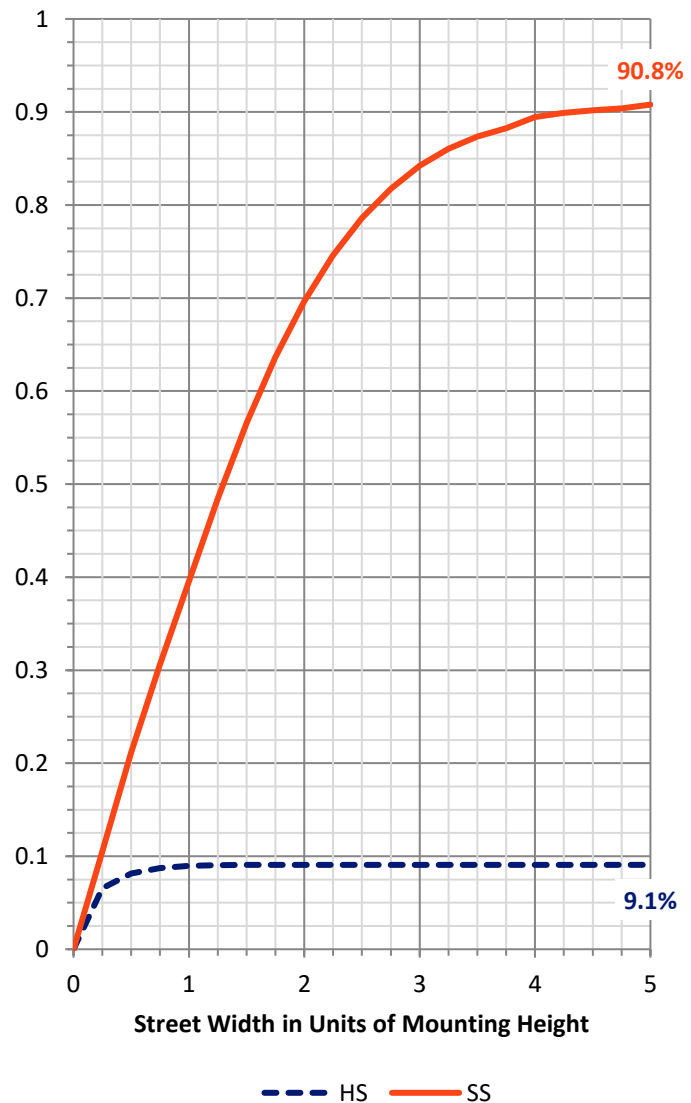
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	226.9	0.0	226.9
	% Fixture	9.1	0.0	9.1
<b>Street Side</b>	Lumens	2254.1	0.0	2254.1
	% Fixture	90.9	0.0	90.9
<b>Total</b>	Lumens	2481.0	0.0	2481.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.0	1.0
10°-20°	71.0	2.9
20°-30°	117.5	4.7
30°-40°	170.1	6.9
40°-50°	278.5	11.2
50°-60°	496.2	20.0
60°-70°	729.4	29.4
70°-80°	550.3	22.2
80°-90°	43.2	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°	2481.0	100.0
0°-180°	2481.0	100.0



REPORT NUMBER: P214924

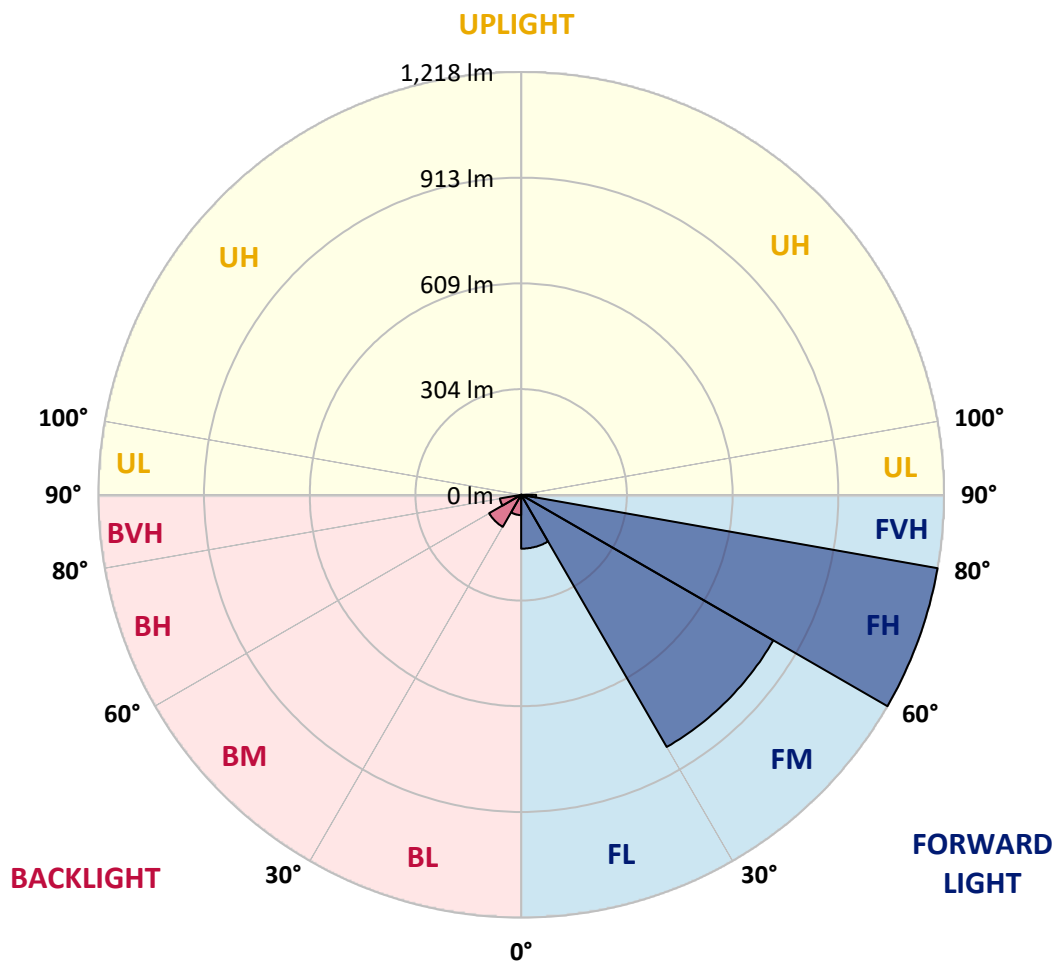
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	155.2	6.3			
FM	(30°-60°)	838.3	33.8			
FH	(60°-80°)	1217.5	49.1			G1/1800
FVH	(80°-90°)	43.1	1.7			G1/100
BL	(0°-30°)	58.3	2.4	B0/110		
BM	(30°-60°)	106.3	4.3	B0/220		
BH	(60°-80°)	62.2	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





REPORT NUMBER: P214924

CATALOG NUMBER: ARCH-AF24-30-D-U-T4W-7030-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	265.4	265.4	265.4	265.4	265.4	265.4	265.4	265.4	265.4	265.4	265.4
2.5°	288.3	288.3	287.7	287.1	284.1	281.2	280.6	278.9	273.6	270.1	266.5
5°	312.3	312.9	311.7	308.8	302.3	295.9	295.3	290.6	280.6	273.6	265.9
7.5°	335.2	336.4	333.5	328.2	320.5	311.1	310.6	301.8	288.8	278.9	267.7
10°	354.6	354.6	350.5	344.0	335.8	325.8	324.7	314.7	300.0	287.7	273.0
12.5°	375.7	375.1	369.3	360.5	351.1	341.7	341.1	328.8	314.7	298.8	280.6
15°	395.1	393.9	386.3	378.1	368.1	358.1	357.5	345.2	330.5	311.7	291.8
17.5°	405.7	405.1	398.0	389.8	381.6	374.0	373.4	360.5	344.6	325.2	302.9
20°	407.4	408.0	402.1	395.1	390.4	386.3	386.3	374.6	357.5	337.0	314.7
22.5°	408.0	409.8	405.7	396.3	395.1	395.7	396.9	387.5	369.9	350.5	327.0
25°	412.1	414.5	411.5	400.4	399.2	403.3	404.5	400.4	384.5	365.2	341.1
27.5°	420.3	422.7	420.3	406.3	404.5	408.6	409.8	412.1	400.4	379.2	355.8
30°	436.8	437.4	432.1	414.5	411.0	416.2	418.0	424.5	415.1	392.8	369.9
32.5°	465.5	459.7	443.8	420.3	417.4	423.3	425.0	432.1	428.6	405.7	384.5
35°	524.3	493.7	457.3	428.6	425.6	431.5	433.8	443.8	445.6	423.9	402.7
37.5°	523.7	496.1	489.0	444.4	440.3	444.4	447.3	459.7	466.7	447.9	429.1
40°	560.7	548.9	548.9	474.4	460.9	466.7	469.7	482.0	494.3	479.6	460.3
42.5°	676.9	669.3	661.0	531.9	489.6	506.1	507.8	515.4	530.1	525.4	502.5
45°	806.6	799.6	767.9	629.3	538.9	541.9	546.0	558.3	579.4	588.2	561.2
47.5°	908.2	901.2	874.1	746.8	615.8	590.0	590.0	614.1	647.0	669.3	643.4
50°	989.8	981.6	965.1	871.8	742.1	659.3	655.8	683.9	732.7	767.3	749.7
52.5°	1069.1	1045.0	1035.0	1001.0	884.7	759.7	750.3	770.2	837.8	880.6	865.9
55°	1121.9	1118.4	1107.8	1119.5	1034.4	881.8	873.6	877.7	962.2	991.0	972.8
57.5°	1171.2	1170.6	1194.1	1248.7	1197.6	1021.5	1008.6	1002.1	1082.6	1075.5	1091.4
60°	1232.3	1221.7	1276.3	1354.4	1347.3	1157.7	1143.0	1130.1	1174.7	1154.8	1233.4
62.5°	1235.2	1232.3	1343.2	1455.4	1495.9	1296.3	1279.2	1232.9	1255.2	1232.3	1369.1
65°	1123.1	1137.7	1371.4	1508.8	1620.3	1417.8	1397.2	1325.0	1326.8	1311.5	1528.7
67.5°	1097.8	1105.5	1293.9	1566.3	1710.1	1540.5	1521.1	1431.3	1410.1	1411.3	1623.3
70°	1035.0	1046.7	1197.6	1562.2	1781.2	1704.3	1684.9	1587.4	1536.4	1479.4	1550.5
72.5°	790.8	810.7	1009.2	1369.6	1761.8	1918.6	1913.3	1785.3	1586.9	1358.5	1173.0
75°	267.7	267.1	530.1	919.9	1582.7	1984.3	1994.9	1760.6	1384.3	937.0	582.4
77.5°	57.5	58.1	109.2	372.8	1051.4	1593.3	1633.8	1328.0	892.9	417.4	133.3
80°	28.2	28.8	45.2	98.6	420.3	893.5	956.9	682.8	329.9	83.4	22.3
82.5°	14.1	14.7	23.5	52.2	155.6	317.6	339.3	251.3	94.5	47.0	11.2
85°	5.3	5.3	11.7	31.1	71.0	74.6	91.6	72.8	56.9	38.2	2.9
87.5°	1.2	1.2	6.5	15.3	31.7	23.5	23.5	22.3	34.6	25.8	1.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P214924

CATALOG NUMBER: ARCH-AF24-30-D-U-T4W-7030-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	265.4	265.4	265.4	265.4	265.4	265.4	265.4	265.4	265.4	265.4	265.4
2.5°	264.8	262.4	258.3	254.2	251.3	247.7	246.0	244.2	243.6	243.0	244.2
5°	261.8	258.3	250.7	244.2	238.4	233.7	230.1	226.6	224.8	223.7	224.3
7.5°	261.8	256.6	245.4	235.4	226.0	216.0	206.1	198.4	192.6	189.0	189.6
10°	264.8	257.7	243.0	229.5	211.9	190.8	169.1	152.6	141.5	135.0	135.0
12.5°	271.2	261.8	243.6	222.5	192.6	155.6	122.7	102.7	94.5	89.8	90.4
15°	280.0	268.9	246.6	213.1	165.6	115.7	85.7	72.8	72.8	74.0	74.6
17.5°	290.0	277.7	248.9	199.0	130.9	82.8	67.5	66.3	68.1	71.0	71.0
20°	300.0	286.5	250.1	176.7	98.0	65.8	64.0	64.0	65.2	68.1	68.7
22.5°	312.3	297.6	248.9	149.1	73.4	62.2	61.6	61.6	61.6	65.2	65.2
25°	325.2	310.6	244.2	119.8	62.2	59.9	59.3	58.7	58.7	61.6	62.2
27.5°	339.9	324.1	233.1	91.6	58.7	57.5	56.9	55.8	55.8	58.1	58.1
30°	354.6	339.3	216.0	69.3	55.8	55.2	54.0	52.8	51.7	54.0	54.0
32.5°	370.4	355.2	193.7	55.2	51.7	51.7	51.1	49.3	48.1	49.3	49.9
35°	391.6	373.4	168.5	48.1	46.4	46.4	46.4	45.8	43.4	44.6	44.6
37.5°	419.8	398.6	139.1	44.6	42.3	41.1	41.1	41.1	39.3	39.9	39.9
40°	455.6	428.0	111.0	41.7	39.3	36.4	35.2	35.8	34.6	34.6	34.1
42.5°	504.3	459.7	83.4	39.3	37.0	32.9	30.5	29.9	28.8	28.2	28.2
45°	574.2	498.4	59.9	37.0	35.2	28.8	26.4	24.7	21.7	20.0	20.0
47.5°	664.6	542.5	44.6	34.6	33.5	25.2	22.3	18.8	14.7	13.5	13.5
50°	774.9	591.8	37.6	31.1	30.5	22.3	17.6	12.3	8.2	7.0	7.6
52.5°	882.4	638.1	33.5	27.6	27.0	19.4	12.9	6.5	3.5	3.5	3.5
55°	972.8	671.0	30.5	24.7	23.5	15.3	7.0	2.9	1.8	1.8	1.8
57.5°	1054.4	689.8	27.6	21.7	18.8	10.6	2.9	1.2	1.2	0.6	0.6
60°	1128.9	701.0	24.1	18.8	14.7	5.9	1.2	0.6	0.6	0.0	0.0
62.5°	1202.3	709.2	20.5	15.3	11.2	2.3	0.6	0.6	0.0	0.0	0.0
65°	1258.1	706.2	16.4	12.3	7.0	1.2	0.6	0.0	0.0	0.0	0.0
67.5°	1256.3	666.3	12.3	9.4	3.5	0.6	0.0	0.0	0.0	0.0	0.0
70°	1123.7	561.2	8.2	5.9	1.2	0.6	0.0	0.0	0.0	0.0	0.0
72.5°	797.2	359.9	5.3	3.5	0.6	0.0	0.0	0.0	0.0	0.0	0.0
75°	351.1	109.2	2.9	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	68.7	25.2	1.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	16.4	2.9	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	7.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.2	0.6	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)