

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: P214783

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214783  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)  
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-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1805 lumens  
Efficiency: N/A  
Efficacy: 86.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - Medium - Semi-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

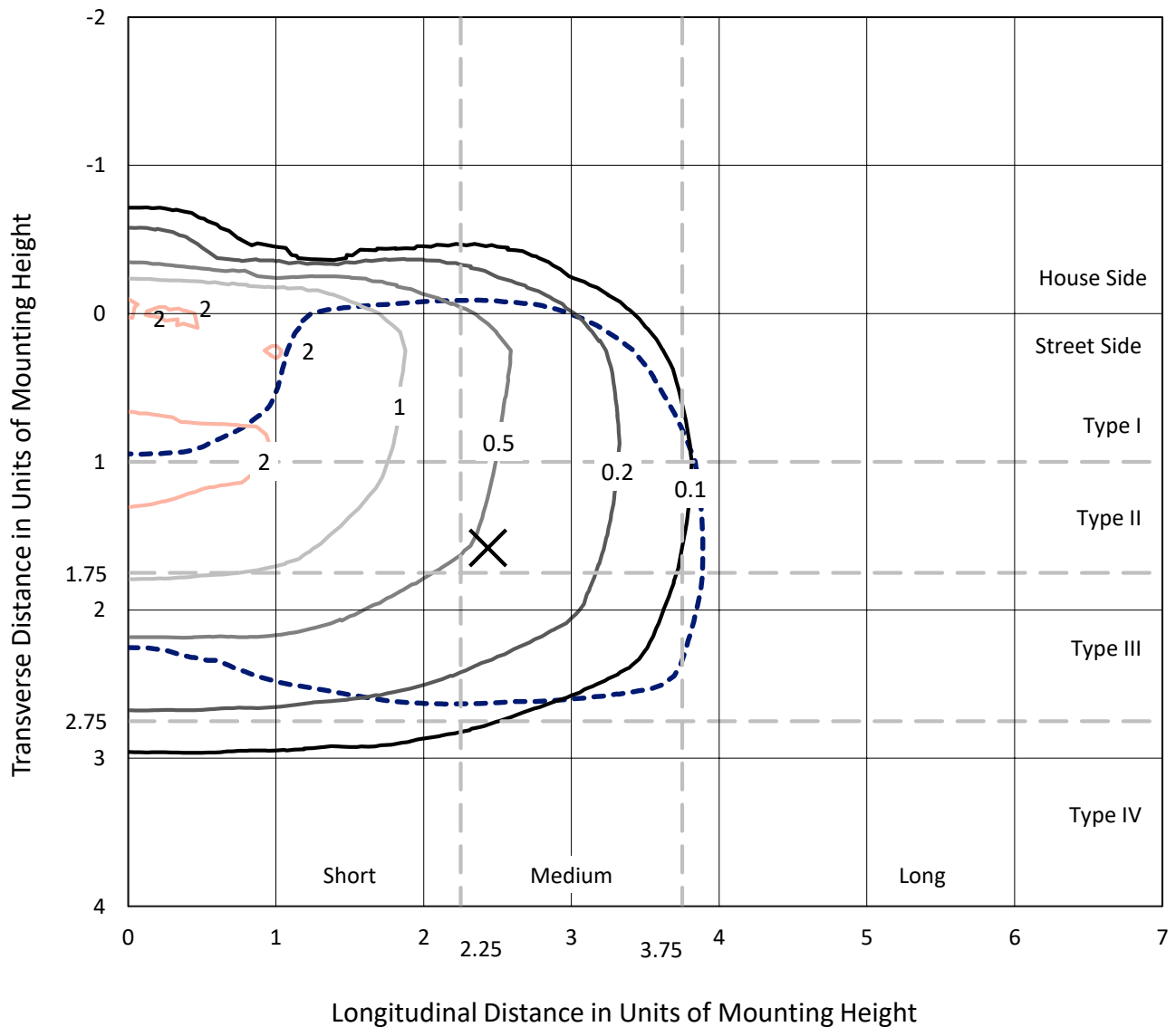


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

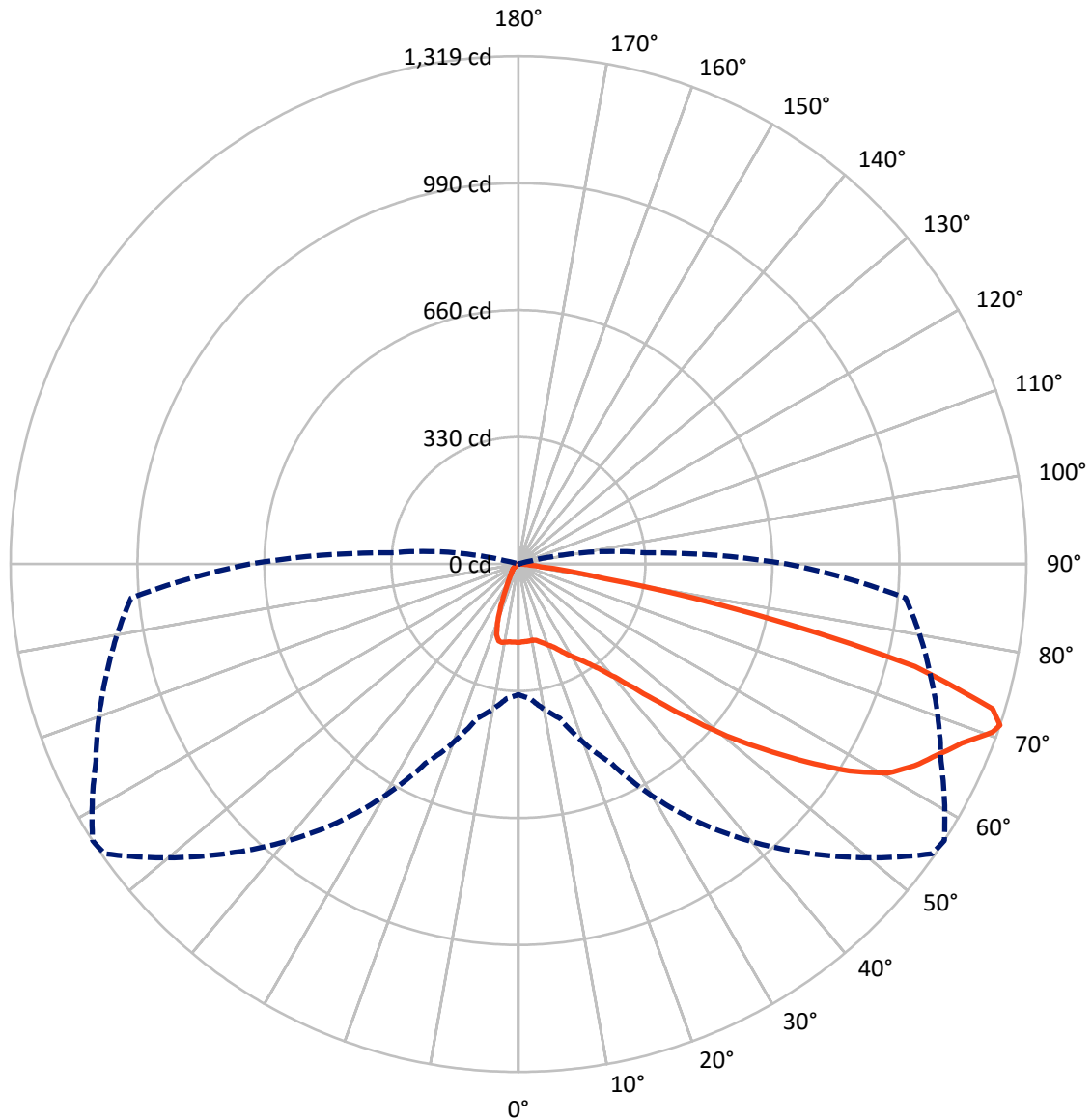


Based on 10 foot mounting height. Maximum calculated value = 2.5 fc  
 Type III - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

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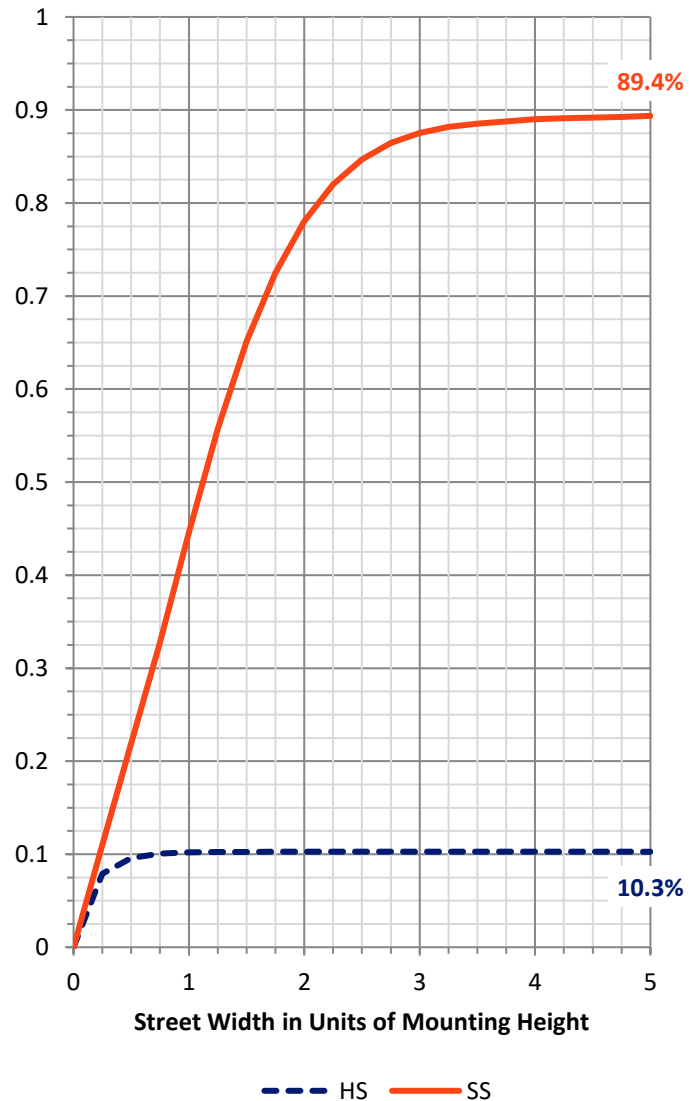
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	187.0	0.0	187.0
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	1617.9	0.0	1617.9
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	1805.0	0.0	1805.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	19.2	1.1
10°-20°	51.2	2.8
20°-30°	79.9	4.4
30°-40°	135.1	7.5
40°-50°	262.3	14.5
50°-60°	440.5	24.4
60°-70°	525.7	29.1
70°-80°	277.0	15.3
80°-90°	14.1	0.8
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°	1805.0	100.0
0°-180°	1805.0	100.0



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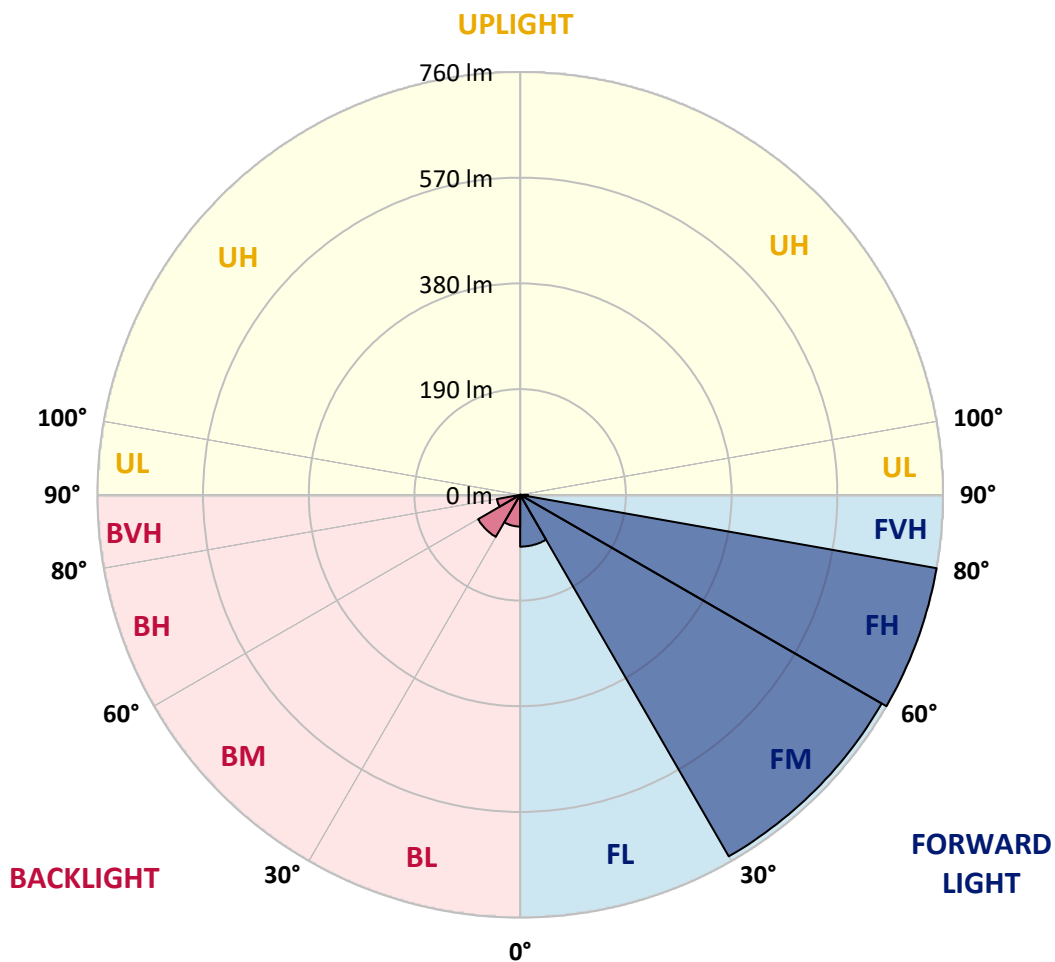
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	93.2	5.2			
FM	(30°-60°)	750.5	41.6			
FH	(60°-80°)	760.3	42.1			G1/1800
FVH	(80°-90°)	13.9	0.8			G1/100
BL	(0°-30°)	57.1	3.2	B0/110		
BM	(30°-60°)	87.3	4.8	B0/220		
BH	(60°-80°)	42.5	2.4	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 III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	204.0	204.0	204.0	204.0	204.0	204.0	204.0	204.0	204.0	204.0	204.0
2.5°	201.0	201.0	201.0	201.5	201.9	201.9	202.7	202.3	202.3	202.3	203.2
5°	195.6	196.0	196.4	197.3	198.9	200.2	202.3	202.3	202.7	203.6	204.0
7.5°	188.0	188.4	189.7	191.4	194.7	197.7	201.0	201.9	203.2	205.3	206.1
10°	183.4	184.2	185.9	188.0	191.8	195.6	199.8	201.0	204.8	208.6	210.7
12.5°	182.1	182.5	184.2	187.6	192.2	196.8	202.3	203.6	209.0	214.9	218.3
15°	184.2	184.6	185.5	189.3	194.7	200.6	207.8	209.5	216.2	222.9	227.1
17.5°	188.0	188.0	188.9	192.2	198.1	204.8	214.1	216.6	224.2	231.8	236.4
20°	190.5	190.5	191.8	195.2	201.9	210.7	221.7	225.0	233.4	241.8	246.1
22.5°	193.1	193.5	194.7	198.5	206.1	218.3	230.9	234.3	243.9	252.8	257.0
25°	200.2	199.8	200.2	203.6	212.4	227.5	243.5	247.7	257.8	267.5	269.6
27.5°	220.0	219.1	213.7	211.6	218.3	237.2	259.5	263.7	275.5	285.2	285.2
30°	265.4	263.7	250.3	233.0	227.5	246.1	274.7	280.5	295.7	304.1	301.6
32.5°	323.0	319.2	302.0	272.6	250.7	257.8	290.6	297.4	316.7	323.9	318.4
35°	386.1	385.7	364.2	326.4	295.3	282.2	311.2	319.2	343.6	349.9	341.1
37.5°	453.0	454.7	440.4	388.2	351.6	322.2	338.6	347.8	377.7	385.3	376.9
40°	527.4	527.0	521.5	459.7	419.3	379.0	378.1	386.5	422.7	434.5	422.7
42.5°	621.7	620.8	601.0	545.5	501.4	453.0	435.7	438.7	479.1	498.4	481.2
45°	717.5	711.7	688.9	641.0	601.9	544.7	511.9	511.9	546.4	572.9	545.9
47.5°	771.0	765.1	755.8	729.3	717.5	653.6	605.2	599.4	626.3	653.2	615.3
50°	841.2	841.2	818.1	808.0	828.2	783.2	708.3	702.4	715.4	736.9	687.3
52.5°	896.7	886.6	870.2	879.1	936.7	916.1	811.3	800.0	810.1	815.5	749.9
55°	919.9	910.2	908.9	941.3	1030.5	1001.9	916.9	906.8	906.0	879.1	804.6
57.5°	924.5	916.1	932.1	988.8	1121.7	1072.1	1022.1	1014.5	990.9	923.6	860.6
60°	885.4	889.6	928.3	1014.9	1175.6	1133.1	1110.8	1102.8	1048.6	961.5	922.8
62.5°	805.0	815.1	887.5	1017.4	1155.8	1157.9	1160.0	1154.6	1093.1	996.0	985.5
65°	710.0	712.9	800.0	982.5	1121.3	1150.3	1196.2	1195.8	1127.2	1034.7	1056.1
67.5°	585.1	590.1	665.4	864.8	1052.3	1147.0	1243.7	1242.5	1165.9	1078.8	1098.2
70°	435.3	441.6	502.6	672.5	898.4	1104.9	1306.0	1306.8	1206.7	1112.5	1069.2
71°	339.4	350.8	414.7	571.2	819.8	1062.4	1311.9	1319.4	1211.3	1107.9	1009.4
72.5°	166.6	180.0	260.4	402.1	674.6	967.4	1273.2	1287.9	1182.3	1050.2	863.1
75°	43.3	45.8	77.8	164.5	361.7	641.0	1026.7	1064.1	966.5	799.6	527.4
77.5°	27.3	28.2	36.6	63.9	135.4	243.5	603.1	621.7	552.3	405.0	185.9
80°	19.3	19.8	23.1	41.2	79.1	71.1	217.0	225.0	199.8	107.3	33.2
82.5°	11.8	11.8	16.8	26.5	48.8	38.7	57.2	61.0	53.8	29.9	10.9
85°	6.7	7.2	10.5	18.1	23.1	18.9	21.5	22.7	23.1	19.8	4.6
87.5°	5.5	5.9	9.3	15.1	12.6	9.3	9.3	9.7	10.1	11.8	2.1
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°	204.0	204.0	204.0	204.0	204.0	204.0	204.0	204.0	204.0	204.0	204.0
2.5°	203.2	203.2	203.6	203.2	203.2	203.2	203.6	203.6	203.6	204.4	204.8
5°	204.0	204.0	204.0	203.6	203.2	203.2	204.0	204.4	204.4	205.7	205.7
7.5°	206.1	206.1	205.3	204.4	203.6	202.3	202.7	203.2	202.7	203.2	203.2
10°	210.7	210.7	209.5	207.8	205.3	201.5	196.4	190.1	184.2	182.1	181.3
12.5°	218.3	217.9	215.3	212.4	206.9	193.9	175.0	152.7	134.2	129.1	127.4
15°	226.7	225.9	222.9	217.9	203.2	168.7	129.1	100.5	82.9	78.7	77.8
17.5°	235.5	234.3	230.1	220.0	185.9	125.3	83.3	63.1	53.4	52.6	53.0
20°	244.8	243.1	237.2	215.8	150.2	83.7	53.8	48.8	47.9	47.9	48.4
22.5°	255.3	253.2	245.2	200.6	109.4	55.5	46.3	45.8	45.4	45.0	45.0
25°	267.5	265.0	252.8	173.3	75.3	45.4	44.2	42.9	42.1	41.2	40.8
27.5°	282.2	278.9	258.7	139.6	51.7	42.5	41.6	39.5	37.9	36.2	36.2
30°	296.9	292.7	257.0	105.2	42.1	39.5	37.9	35.3	32.8	31.1	30.7
32.5°	312.5	308.3	246.1	70.7	38.3	36.2	34.1	30.3	27.3	25.2	24.8
35°	335.6	332.3	224.6	46.7	34.5	32.0	29.0	25.2	21.5	19.3	18.9
37.5°	370.1	365.9	198.1	35.8	30.3	26.5	24.0	19.8	16.0	13.9	13.5
40°	416.4	403.8	166.6	31.5	26.5	21.9	18.5	14.3	11.4	10.1	10.1
42.5°	470.2	440.4	132.5	28.6	23.6	18.1	13.5	9.7	8.0	7.6	7.6
45°	527.4	474.4	98.4	26.5	20.6	14.3	9.7	6.7	5.9	5.5	5.5
47.5°	586.3	502.2	68.6	24.0	17.2	10.9	6.7	5.0	4.2	3.8	3.8
50°	641.4	520.3	48.4	21.5	14.7	8.0	5.0	3.8	2.9	2.9	2.9
52.5°	679.7	518.6	34.9	18.5	11.4	5.5	3.4	2.5	2.5	2.5	2.5
55°	713.3	512.3	27.3	16.0	8.8	3.8	2.5	2.1	2.1	1.7	1.7
57.5°	741.9	502.2	23.1	13.0	6.3	2.9	1.7	1.7	1.3	1.3	1.3
60°	766.3	489.6	19.3	10.9	4.2	2.1	1.3	0.8	0.8	0.4	0.8
62.5°	799.6	481.6	16.8	8.4	2.9	1.3	0.8	0.4	0.4	0.0	0.0
65°	824.0	466.4	14.3	5.9	1.7	0.8	0.4	0.4	0.0	0.0	0.0
67.5°	824.8	439.1	10.5	3.4	1.3	0.8	0.4	0.0	0.0	0.0	0.0
70°	758.3	374.3	6.7	1.7	0.8	0.4	0.4	0.0	0.0	0.0	0.0
71°	697.4	331.4	5.5	1.3	0.8	0.4	0.0	0.0	0.0	0.0	0.0
72.5°	574.5	243.5	4.2	1.3	0.4	0.4	0.0	0.0	0.0	0.0	0.0
75°	316.7	88.3	2.1	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	101.4	26.9	1.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	17.2	4.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	5.9	1.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.7	0.8	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)