

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: P265874

Luminaire Tested: **ARCH-AF16-20-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265874
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-AF16-20-D-U-T3-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 420mA LIGHT ENGINE WITH 16 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1857.9 lumens
Efficiency: N/A
Efficacy: 77.4 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): 24
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

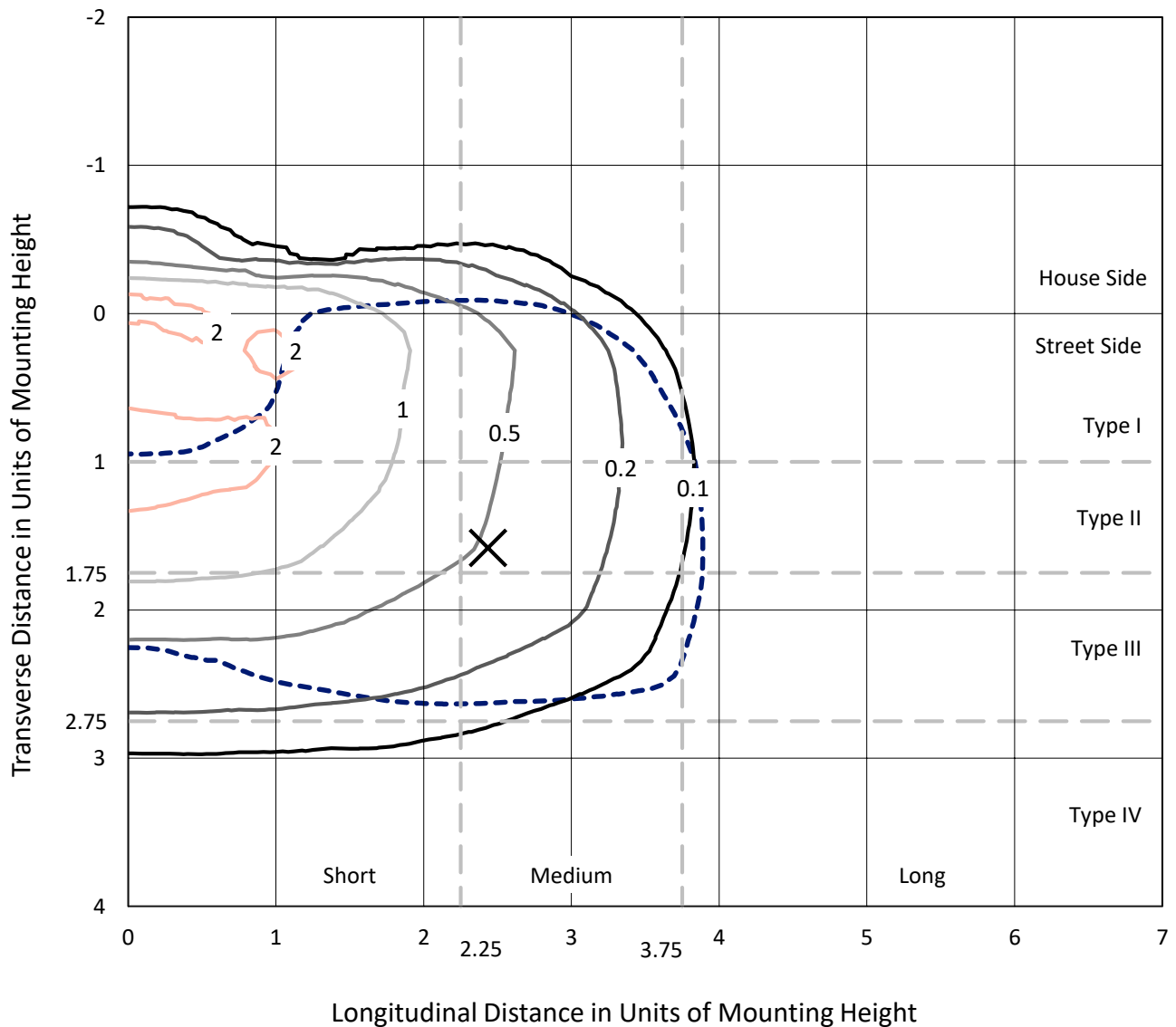


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

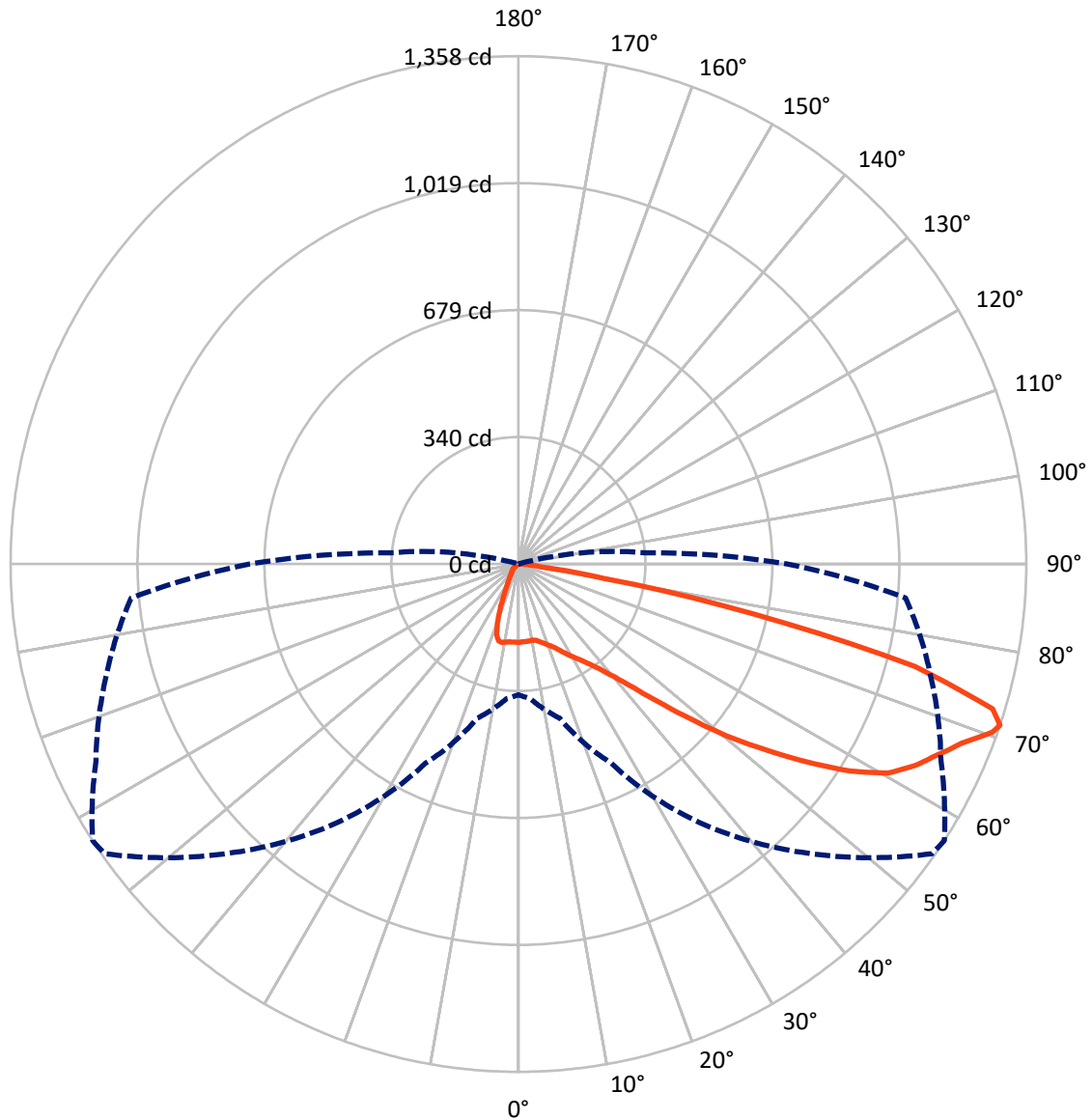


Based on 10 foot mounting height. Maximum calculated value = 2.6 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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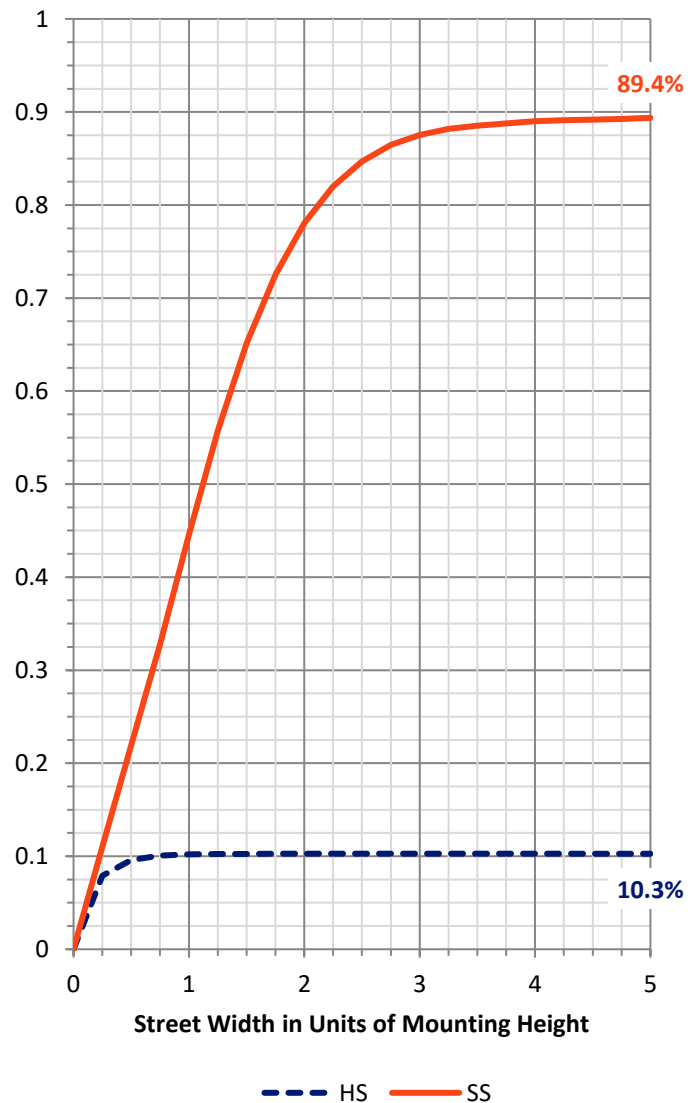
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	192.5	0.0	192.5
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	1665.4	0.0	1665.4
	% Fixture	89.6	0.0	89.6
Total	Lumens	1857.9	0.0	1857.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.7	1.1
10°-20°	52.7	2.8
20°-30°	82.2	4.4
30°-40°	139.0	7.5
40°-50°	270.0	14.5
50°-60°	453.4	24.4
60°-70°	541.1	29.1
70°-80°	285.2	15.3
80°-90°	14.5	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°	1857.9	100.0
0°-180°	1857.9	100.0



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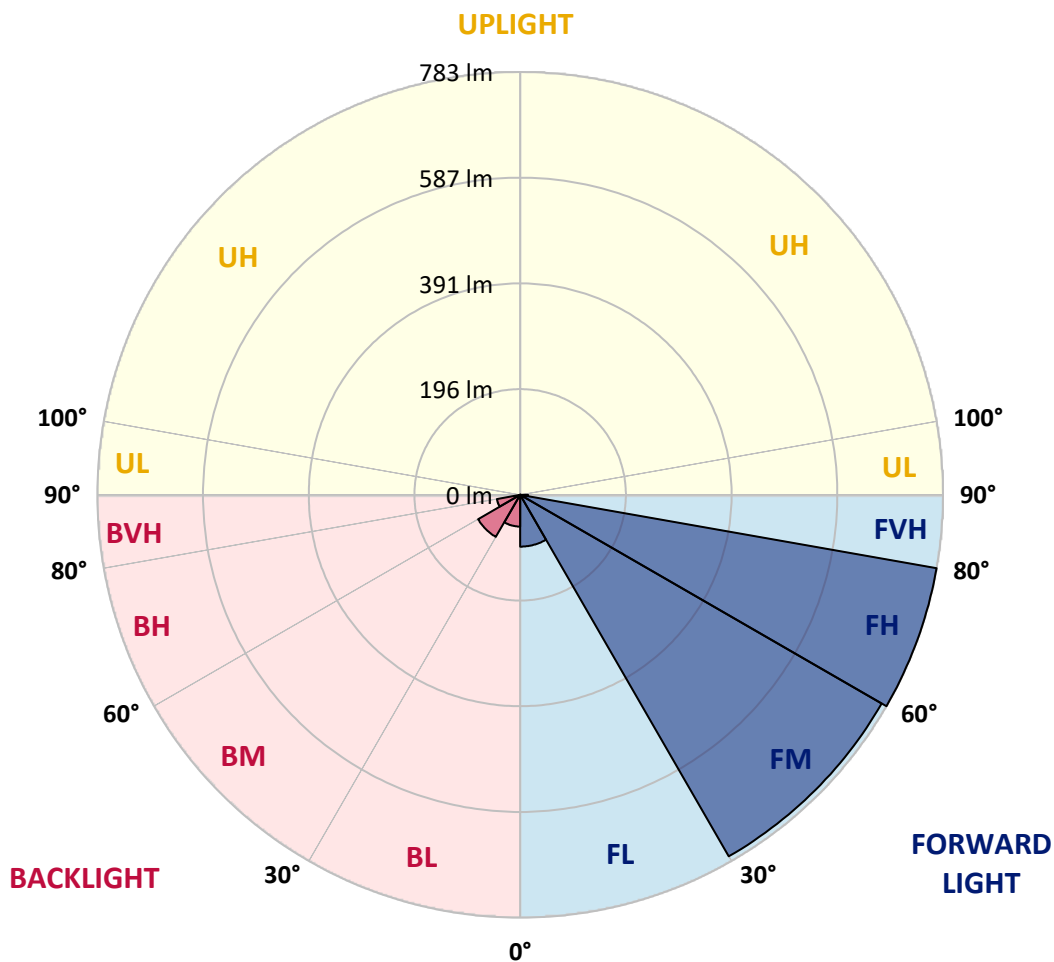
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	95.9	5.2			
FM	(30°-60°)	772.5	41.6			
FH	(60°-80°)	782.6	42.1			G1/1800
FVH	(80°-90°)	14.4	0.8			G1/100
BL	(0°-30°)	58.8	3.2	B0/110		
BM	(30°-60°)	89.9	4.8	B0/220		
BH	(60°-80°)	43.7	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°	209.9	209.9	209.9	209.9	209.9	209.9	209.9	209.9	209.9	209.9	209.9
2.5°	206.9	206.9	206.9	207.4	207.8	207.8	208.6	208.2	208.2	208.2	209.1
5°	201.3	201.8	202.2	203.0	204.8	206.2	208.2	208.2	208.6	209.6	209.9
7.5°	193.6	193.9	195.2	197.0	200.4	203.5	206.9	207.8	209.1	211.3	212.1
10°	188.7	189.6	191.3	193.6	197.4	201.3	205.6	206.9	210.8	214.8	216.9
12.5°	187.4	187.8	189.6	193.0	197.8	202.6	208.2	209.6	215.1	221.3	224.7
15°	189.6	190.0	190.9	194.8	200.4	206.5	213.8	215.7	222.5	229.4	233.7
17.5°	193.6	193.6	194.5	197.8	203.9	210.8	220.4	223.0	230.8	238.6	243.4
20°	196.1	196.1	197.4	201.0	207.8	216.9	228.2	231.7	240.2	248.9	253.2
22.5°	198.7	199.2	200.4	204.4	212.1	224.7	237.7	241.1	251.0	260.1	264.6
25°	206.2	205.6	206.2	209.6	218.6	234.2	250.6	254.9	265.4	275.3	277.5
27.5°	226.5	225.6	219.9	217.7	224.7	244.2	267.2	271.5	283.5	293.6	293.6
30°	273.2	271.5	257.6	239.8	234.2	253.2	282.6	288.7	304.3	313.0	310.5
32.5°	332.6	328.6	310.9	280.5	258.1	265.4	299.1	306.1	326.1	333.5	327.7
35°	397.4	397.1	375.0	336.0	303.9	290.5	320.3	328.6	353.8	360.2	351.1
37.5°	466.3	467.9	453.3	399.6	361.9	331.7	348.5	358.1	388.7	396.6	387.9
40°	542.9	542.4	536.8	473.1	431.6	390.0	389.2	397.9	435.0	447.3	435.0
42.5°	640.0	639.1	618.7	561.5	516.0	466.3	448.6	451.6	493.1	513.0	495.2
45°	738.5	732.6	709.1	659.7	619.6	560.6	526.9	526.9	562.3	589.6	562.0
47.5°	793.7	787.5	778.0	750.8	738.5	672.8	623.1	617.0	644.7	672.3	633.3
50°	865.8	865.8	842.2	831.7	852.4	806.0	729.1	723.0	736.4	758.4	707.4
52.5°	923.0	912.7	895.8	904.9	964.2	943.0	835.2	823.4	833.8	839.5	772.0
55°	946.9	936.9	935.6	968.9	1060.7	1031.3	943.8	933.3	932.5	904.9	828.1
57.5°	951.7	943.0	959.4	1017.8	1154.6	1103.6	1052.0	1044.3	1020.0	950.8	885.8
60°	911.3	915.6	955.4	1044.6	1210.0	1166.3	1143.5	1135.2	1079.4	989.8	949.9
62.5°	828.6	839.0	913.4	1047.2	1189.7	1192.0	1194.0	1188.4	1125.1	1025.1	1014.4
65°	730.9	733.8	823.4	1011.3	1154.2	1184.1	1231.2	1230.9	1160.3	1065.0	1087.0
67.5°	602.3	607.4	684.9	890.1	1083.3	1180.6	1280.3	1278.8	1200.1	1110.5	1130.3
70°	448.1	454.6	517.3	692.2	924.7	1137.3	1344.3	1345.1	1242.0	1145.1	1100.6
71°	349.4	361.1	426.9	587.9	843.8	1093.5	1350.3	1358.1	1246.8	1140.4	1039.1
72.5°	171.4	185.3	268.0	413.8	694.4	995.7	1310.4	1325.7	1217.1	1081.0	888.5
75°	44.6	47.3	80.0	169.3	372.3	659.7	1056.8	1095.4	995.0	822.9	542.9
77.5°	28.1	29.0	37.6	65.8	139.3	250.6	620.8	640.0	568.4	417.0	191.3
80°	19.9	20.3	23.9	42.4	81.3	73.1	223.4	231.7	205.6	110.4	34.1
82.5°	12.1	12.1	17.2	27.3	50.2	39.9	58.8	62.8	55.4	30.7	11.3
85°	6.9	7.4	10.8	18.7	23.9	19.5	22.1	23.4	23.9	20.3	4.9
87.5°	5.6	6.1	9.5	15.6	12.9	9.5	9.5	9.9	10.4	12.1	2.2
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°	209.9	209.9	209.9	209.9	209.9	209.9	209.9	209.9	209.9	209.9	209.9
2.5°	209.1	209.1	209.6	209.1	209.1	209.1	209.6	209.6	209.6	210.5	210.8
5°	209.9	209.9	209.9	209.6	209.1	209.1	209.9	210.5	210.5	211.7	211.7
7.5°	212.1	212.1	211.3	210.5	209.6	208.2	208.6	209.1	208.6	209.1	209.1
10°	216.9	216.9	215.7	213.8	211.3	207.4	202.2	195.7	189.6	187.4	186.6
12.5°	224.7	224.2	221.6	218.6	213.0	199.7	180.1	157.2	138.1	132.9	131.2
15°	233.4	232.5	229.4	224.2	209.1	173.6	132.9	103.5	85.2	80.9	80.0
17.5°	242.5	241.1	236.9	226.5	191.3	129.0	85.7	64.9	54.9	54.1	54.5
20°	252.0	250.3	244.2	222.2	154.6	86.1	55.4	50.2	49.3	49.3	49.8
22.5°	262.8	260.6	252.5	206.5	112.6	57.1	47.6	47.3	46.7	46.4	46.4
25°	275.3	272.7	260.1	178.4	77.6	46.7	45.5	44.1	43.3	42.4	42.0
27.5°	290.5	287.1	266.3	143.6	53.3	43.7	42.8	40.8	38.9	37.2	37.2
30°	305.7	301.3	264.6	108.2	43.3	40.8	38.9	36.4	33.7	32.0	31.6
32.5°	321.7	317.3	253.2	72.8	39.3	37.2	35.0	31.3	28.1	26.1	25.5
35°	345.5	342.1	231.3	48.1	35.6	32.9	29.9	26.1	22.1	19.9	19.5
37.5°	381.1	376.7	203.9	36.8	31.3	27.3	24.7	20.3	16.4	14.4	13.8
40°	428.6	415.6	171.4	32.5	27.3	22.5	19.0	14.7	11.7	10.4	10.4
42.5°	484.0	453.3	136.4	29.5	24.3	18.7	13.8	9.9	8.3	7.7	7.7
45°	542.9	488.4	101.2	27.3	21.2	14.7	9.9	6.9	6.1	5.6	5.6
47.5°	603.5	517.0	70.5	24.7	17.7	11.3	6.9	5.2	4.3	4.0	4.0
50°	660.3	535.6	49.8	22.1	15.1	8.3	5.2	4.0	3.1	3.1	3.1
52.5°	699.6	533.9	35.9	19.0	11.7	5.6	3.5	2.5	2.5	2.5	2.5
55°	734.3	527.3	28.1	16.4	9.2	4.0	2.5	2.2	2.2	1.7	1.7
57.5°	763.6	517.0	23.9	13.5	6.5	3.1	1.7	1.7	1.3	1.3	1.3
60°	788.8	503.9	19.9	11.3	4.3	2.2	1.3	0.9	0.9	0.4	0.9
62.5°	822.9	495.8	17.2	8.7	3.1	1.3	0.9	0.4	0.4	0.0	0.0
65°	848.1	480.1	14.7	6.1	1.7	0.9	0.4	0.4	0.0	0.0	0.0
67.5°	849.0	451.9	10.8	3.5	1.3	0.9	0.4	0.0	0.0	0.0	0.0
70°	780.5	385.4	6.9	1.7	0.9	0.4	0.4	0.0	0.0	0.0	0.0
71°	717.8	341.1	5.6	1.3	0.9	0.4	0.0	0.0	0.0	0.0	0.0
72.5°	591.4	250.6	4.3	1.3	0.4	0.4	0.0	0.0	0.0	0.0	0.0
75°	326.1	90.9	2.2	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	104.4	27.7	1.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	17.7	4.3	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.1	1.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.9	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)