

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: P214784

Luminaire Tested: **ARCH-AF24-30-D-U-T3-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214784
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-AF24-30-D-U-T3-7030-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 375mA 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: 2527 lumens
Efficiency: N/A
Efficacy: 81.5 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): 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

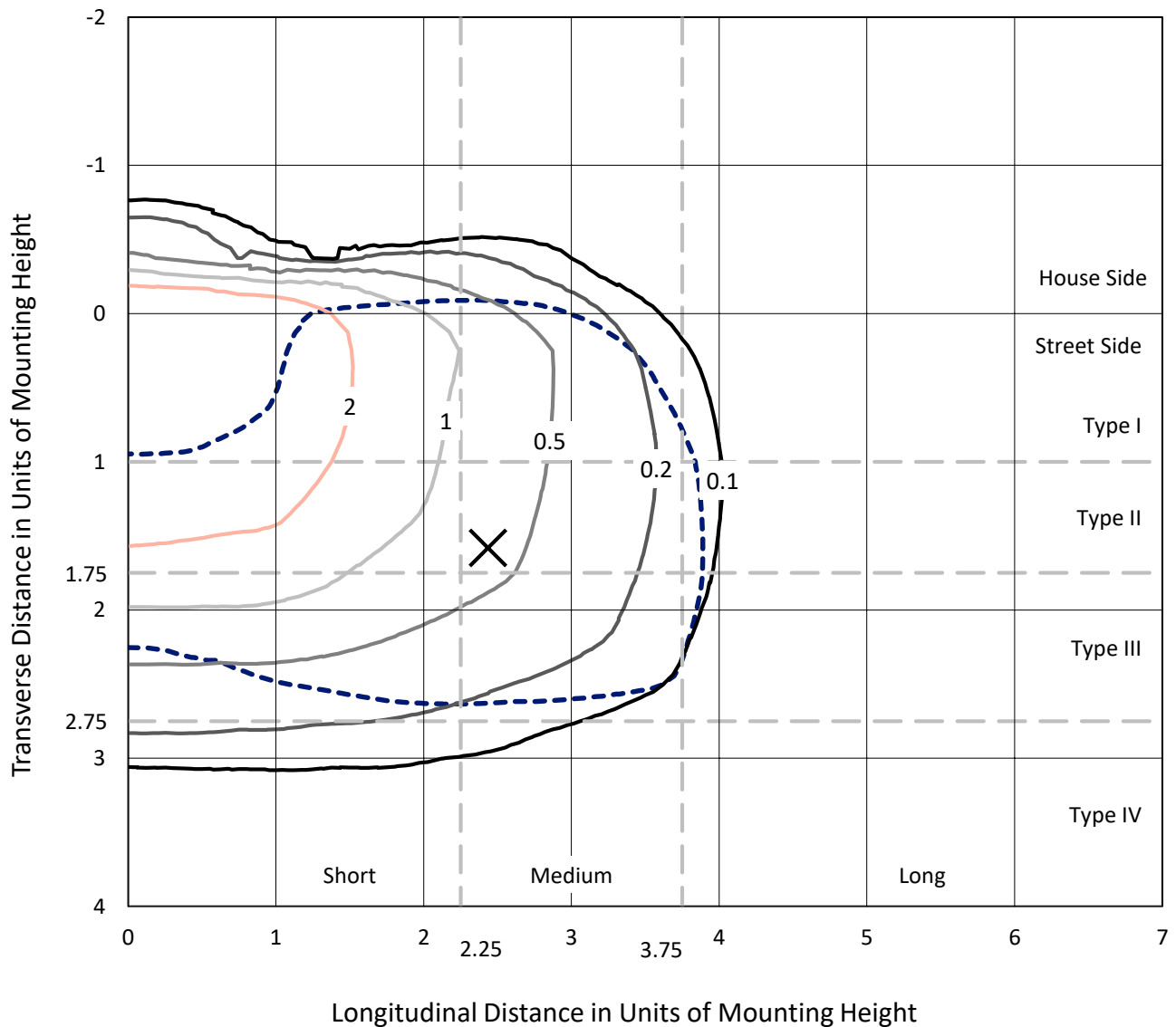


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

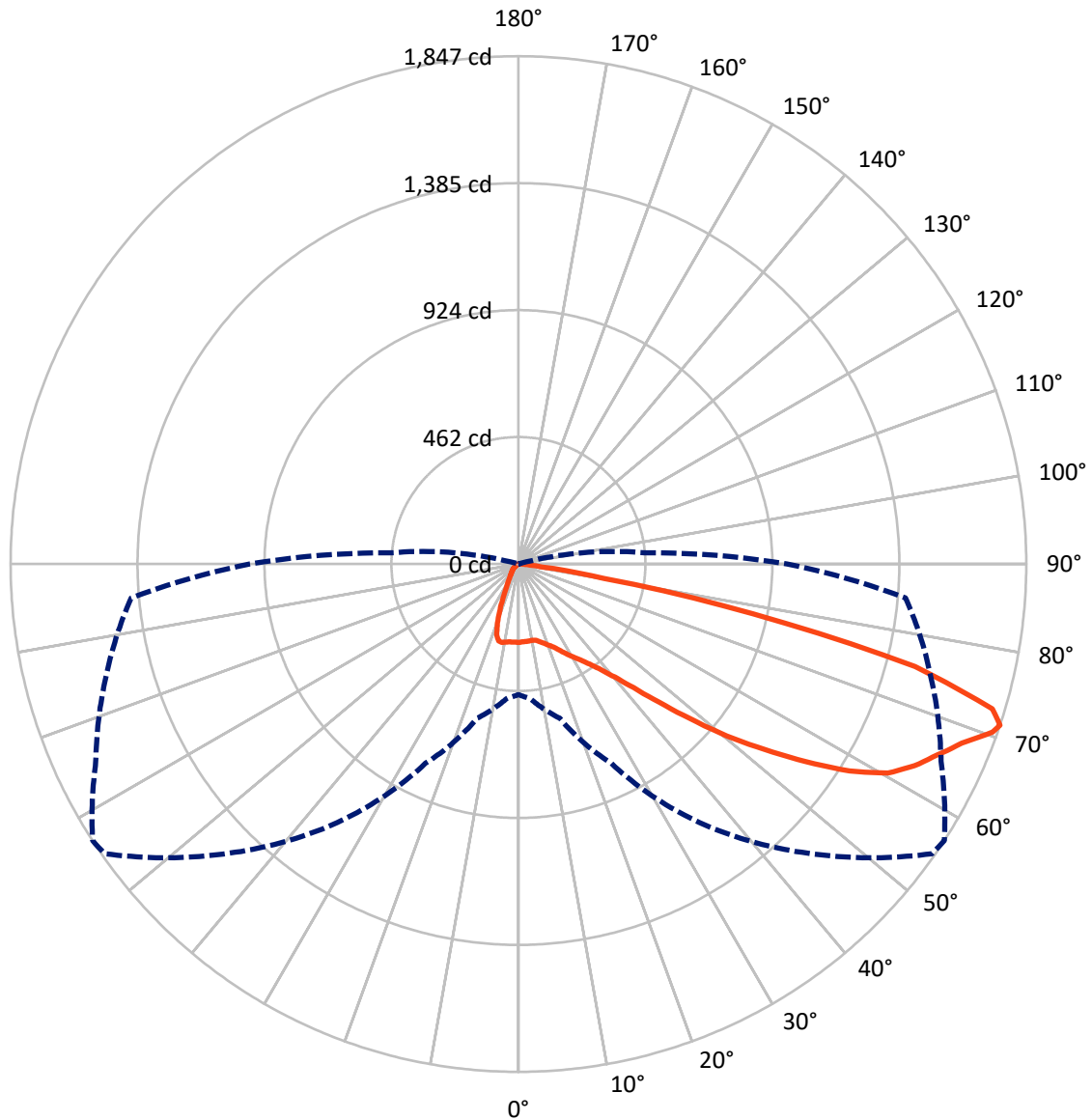


Based on 10 foot mounting height. Maximum calculated value = 3.6 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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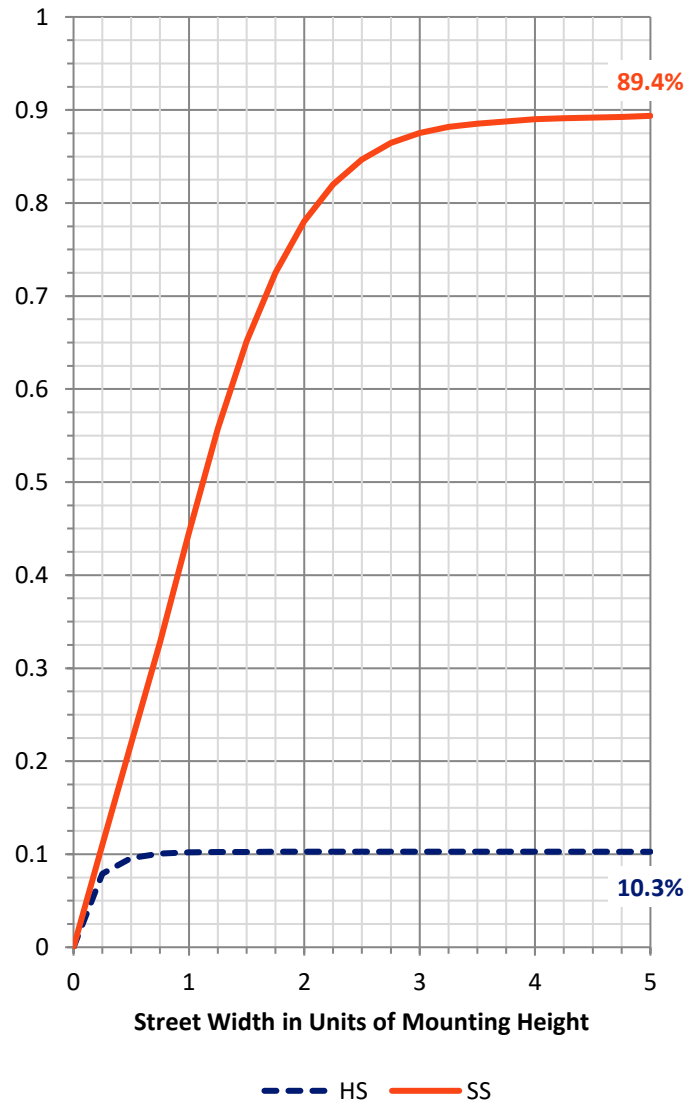
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	261.9	0.0	261.9
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	2265.1	0.0	2265.1
	% Fixture	89.6	0.0	89.6
Total	Lumens	2527.0	0.0	2527.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.8	1.1
10°-20°	71.7	2.8
20°-30°	111.9	4.4
30°-40°	189.1	7.5
40°-50°	367.2	14.5
50°-60°	616.7	24.4
60°-70°	736.0	29.1
70°-80°	387.9	15.3
80°-90°	19.7	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°	2527.0	100.0
0°-180°	2527.0	100.0



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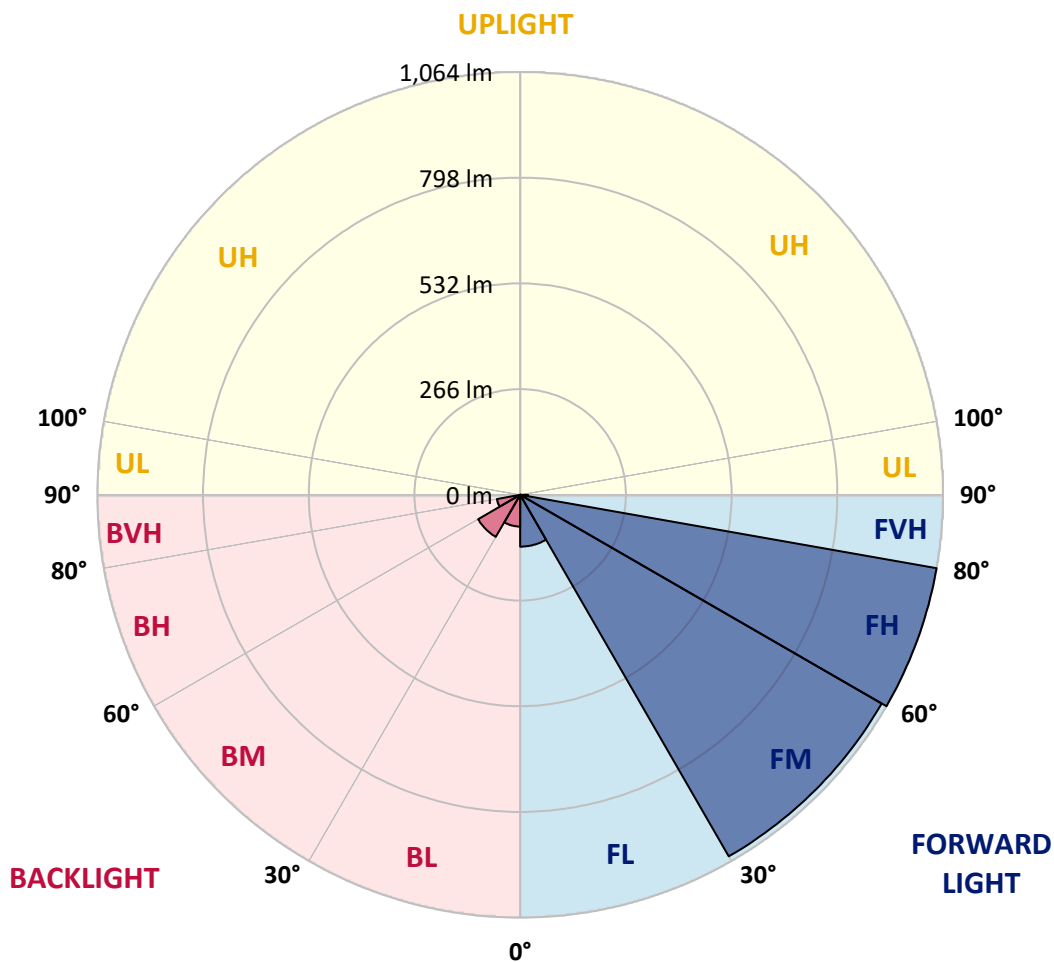
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	130.5	5.2			
FM	(30°-60°)	1050.8	41.6			
FH	(60°-80°)	1064.4	42.1			G1/1800
FVH	(80°-90°)	19.5	0.8			G1/100
BL	(0°-30°)	79.9	3.2	B0/110		
BM	(30°-60°)	122.3	4.8	B0/220		
BH	(60°-80°)	59.5	2.4	B0/110		G0/110
BVH	(80°-90°)	0.2	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°	285.6	285.6	285.6	285.6	285.6	285.6	285.6	285.6	285.6	285.6	285.6
2.5°	281.5	281.5	281.5	282.1	282.6	282.6	283.8	283.2	283.2	283.2	284.4
5°	273.8	274.4	275.0	276.2	278.5	280.3	283.2	283.2	283.8	285.0	285.6
7.5°	263.2	263.8	265.6	267.9	272.6	276.8	281.5	282.6	284.4	287.4	288.5
10°	256.7	257.9	260.3	263.2	268.5	273.8	279.7	281.5	286.8	292.1	295.0
12.5°	255.0	255.6	257.9	262.6	269.1	275.6	283.2	285.0	292.7	300.9	305.6
15°	257.9	258.5	259.7	265.0	272.6	280.9	290.9	293.2	302.7	312.1	318.0
17.5°	263.2	263.2	264.4	269.1	277.3	286.8	299.7	303.3	313.9	324.5	330.9
20°	266.7	266.7	268.5	273.2	282.6	295.0	310.3	315.0	326.8	338.6	344.5
22.5°	270.3	270.9	272.6	277.9	288.5	305.6	323.3	328.0	341.5	353.9	359.8
25°	280.3	279.7	280.3	285.0	297.4	318.6	340.9	346.8	361.0	374.5	377.4
27.5°	308.0	306.8	299.1	296.2	305.6	332.1	363.3	369.2	385.7	399.2	399.2
30°	371.6	369.2	350.4	326.2	318.6	344.5	384.5	392.8	414.0	425.7	422.2
32.5°	452.2	446.9	422.8	381.6	351.0	361.0	406.9	416.3	443.4	453.4	445.8
35°	540.6	540.0	509.9	456.9	413.4	395.1	435.7	446.9	481.1	489.9	477.6
37.5°	634.2	636.5	616.5	543.5	492.3	451.1	474.0	487.0	528.8	539.4	527.6
40°	738.4	737.8	730.2	643.6	587.1	530.5	529.4	541.1	591.8	608.3	591.8
42.5°	870.3	869.1	841.5	763.7	701.9	634.2	610.0	614.2	670.7	697.8	673.6
45°	1004.6	996.3	964.5	897.4	842.6	762.6	716.6	716.6	764.9	802.0	764.3
47.5°	1079.4	1071.1	1058.2	1021.1	1004.6	915.1	847.3	839.1	876.8	914.5	861.5
50°	1177.7	1177.7	1145.3	1131.2	1159.4	1096.4	991.6	983.4	1001.6	1031.7	962.2
52.5°	1255.4	1241.3	1218.3	1230.7	1311.4	1282.5	1135.9	1120.0	1134.1	1141.8	1049.9
55°	1287.8	1274.3	1272.5	1317.8	1442.7	1402.6	1283.7	1269.5	1268.4	1230.7	1126.5
57.5°	1294.3	1282.5	1304.9	1384.4	1570.4	1501.0	1430.9	1420.3	1387.3	1293.1	1204.8
60°	1239.5	1245.4	1299.6	1420.9	1645.8	1586.3	1555.1	1543.9	1468.0	1346.1	1291.9
62.5°	1127.0	1141.2	1242.5	1424.4	1618.1	1621.1	1624.0	1616.4	1530.4	1394.4	1379.7
65°	994.0	998.1	1120.0	1375.5	1569.9	1610.5	1674.7	1674.1	1578.1	1448.6	1478.6
67.5°	819.1	826.1	931.6	1210.7	1473.3	1605.8	1741.2	1739.4	1632.3	1510.4	1537.5
70°	609.5	618.3	703.7	941.6	1257.8	1546.9	1828.4	1829.5	1689.4	1557.5	1496.8
71°	475.2	491.1	580.6	799.7	1147.7	1487.4	1836.6	1847.2	1695.9	1551.0	1413.2
72.5°	233.2	252.0	364.5	562.9	944.5	1354.3	1782.4	1803.0	1655.2	1470.3	1208.3
75°	60.7	64.2	108.9	230.2	506.4	897.4	1437.4	1489.8	1353.2	1119.4	738.4
77.5°	38.3	39.5	51.2	89.5	189.6	340.9	844.4	870.3	773.2	567.1	260.3
80°	27.1	27.7	32.4	57.7	110.7	99.5	303.8	315.0	279.7	150.2	46.5
82.5°	16.5	16.5	23.6	37.1	68.3	54.2	80.1	85.4	75.4	41.8	15.3
85°	9.4	10.0	14.7	25.3	32.4	26.5	30.0	31.8	32.4	27.7	6.5
87.5°	7.7	8.2	13.0	21.2	17.7	13.0	13.0	13.5	14.1	16.5	2.9
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°	285.6	285.6	285.6	285.6	285.6	285.6	285.6	285.6	285.6	285.6	285.6
2.5°	284.4	284.4	285.0	284.4	284.4	284.4	285.0	285.0	285.0	286.2	286.8
5°	285.6	285.6	285.6	285.0	284.4	284.4	285.6	286.2	286.2	287.9	287.9
7.5°	288.5	288.5	287.4	286.2	285.0	283.2	283.8	284.4	283.8	284.4	284.4
10°	295.0	295.0	293.2	290.9	287.4	282.1	275.0	266.2	257.9	255.0	253.8
12.5°	305.6	305.0	301.5	297.4	289.7	271.5	245.0	213.8	187.8	180.8	178.4
15°	317.4	316.2	312.1	305.0	284.4	236.1	180.8	140.7	116.0	110.1	108.9
17.5°	329.8	328.0	322.1	308.0	260.3	175.5	116.6	88.3	74.8	73.6	74.2
20°	342.7	340.4	332.1	302.1	210.2	117.2	75.4	68.3	67.1	67.1	67.7
22.5°	357.4	354.5	343.3	280.9	153.1	77.7	64.8	64.2	63.6	63.0	63.0
25°	374.5	371.0	353.9	242.6	105.4	63.6	61.8	60.1	58.9	57.7	57.1
27.5°	395.1	390.4	362.1	195.5	72.4	59.5	58.3	55.4	53.0	50.6	50.6
30°	415.7	409.8	359.8	147.2	58.9	55.4	53.0	49.5	45.9	43.6	43.0
32.5°	437.5	431.6	344.5	98.9	53.6	50.6	47.7	42.4	38.3	35.3	34.7
35°	469.9	465.2	314.4	65.4	48.3	44.8	40.6	35.3	30.0	27.1	26.5
37.5°	518.2	512.3	277.3	50.1	42.4	37.1	33.6	27.7	22.4	19.4	18.8
40°	583.0	565.3	233.2	44.2	37.1	30.6	25.9	20.0	15.9	14.1	14.1
42.5°	658.3	616.5	185.5	40.0	33.0	25.3	18.8	13.5	11.2	10.6	10.6
45°	738.4	664.2	137.8	37.1	28.9	20.0	13.5	9.4	8.2	7.7	7.7
47.5°	820.8	703.1	96.0	33.6	24.1	15.3	9.4	7.1	5.9	5.3	5.3
50°	898.0	728.4	67.7	30.0	20.6	11.2	7.1	5.3	4.1	4.1	4.1
52.5°	951.6	726.0	48.9	25.9	15.9	7.7	4.7	3.5	3.5	3.5	3.5
55°	998.7	717.2	38.3	22.4	12.4	5.3	3.5	2.9	2.9	2.4	2.4
57.5°	1038.7	703.1	32.4	18.3	8.8	4.1	2.4	2.4	1.8	1.8	1.8
60°	1072.9	685.4	27.1	15.3	5.9	2.9	1.8	1.2	1.2	0.6	1.2
62.5°	1119.4	674.2	23.6	11.8	4.1	1.8	1.2	0.6	0.6	0.0	0.0
65°	1153.5	653.0	20.0	8.2	2.4	1.2	0.6	0.6	0.0	0.0	0.0
67.5°	1154.7	614.8	14.7	4.7	1.8	1.2	0.6	0.0	0.0	0.0	0.0
70°	1061.7	524.1	9.4	2.4	1.2	0.6	0.6	0.0	0.0	0.0	0.0
71°	976.3	464.0	7.7	1.8	1.2	0.6	0.0	0.0	0.0	0.0	0.0
72.5°	804.4	340.9	5.9	1.8	0.6	0.6	0.0	0.0	0.0	0.0	0.0
75°	443.4	123.7	2.9	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	141.9	37.7	1.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	24.1	5.9	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	8.2	2.4	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.4	1.2	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)