

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: P214667

Luminaire Tested: **ARCH-AF16-30-D-U-T2R-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214667
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF16-30-D-U-T2R-7050-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2931 lumens
Efficiency: N/A
Efficacy: 91.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 32
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

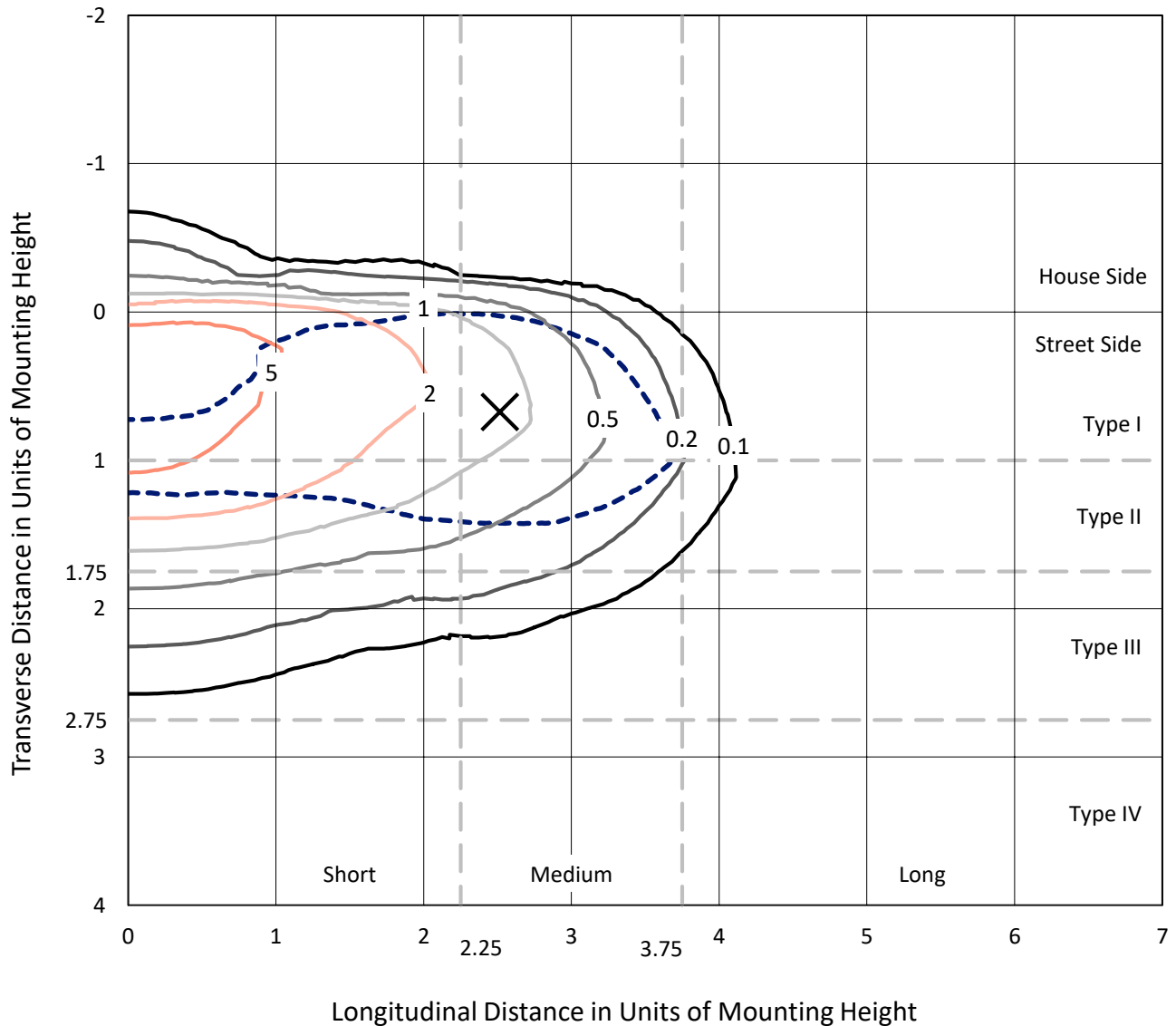


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

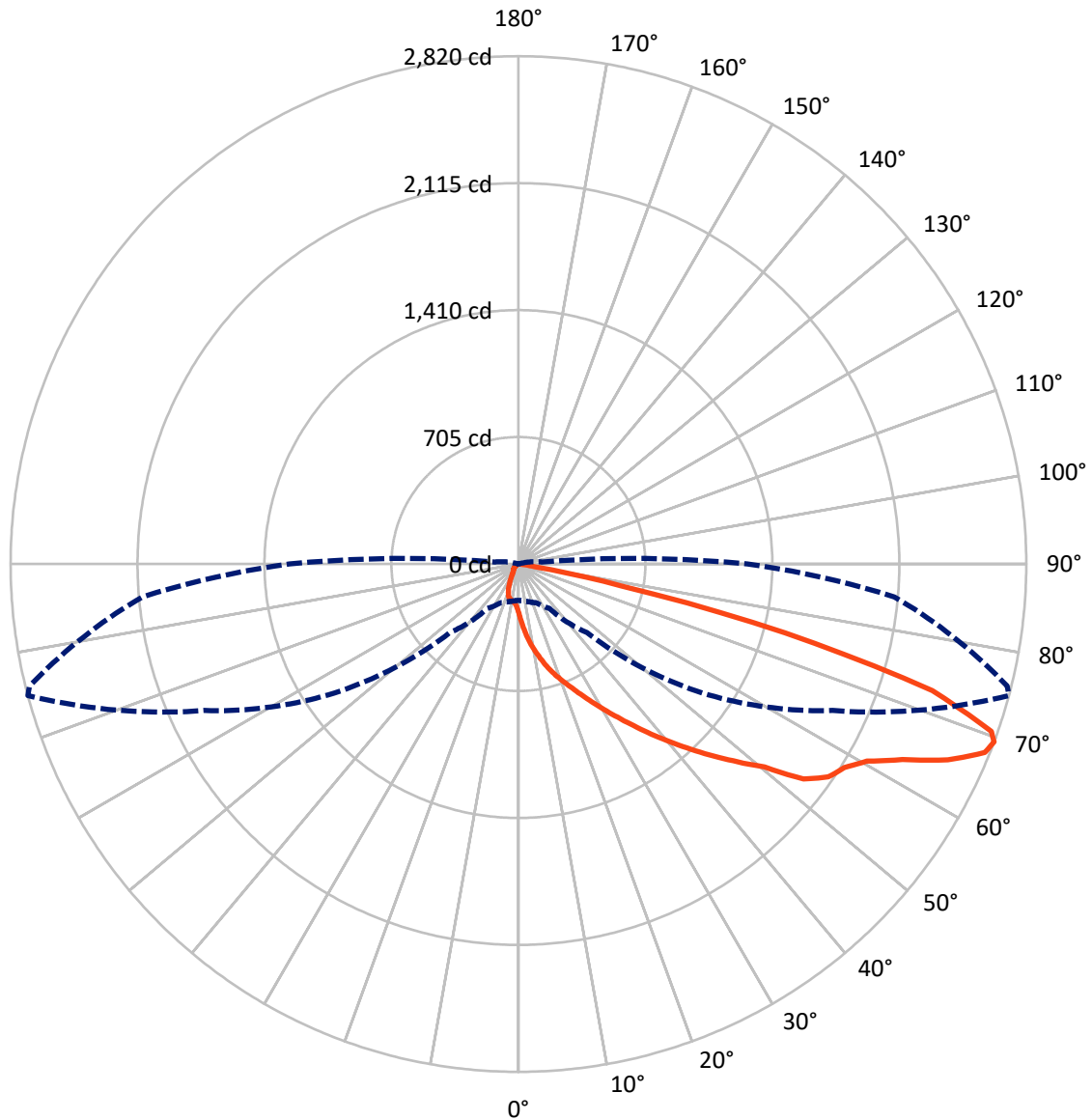


Based on 10 foot mounting height. Maximum calculated value = 7.5 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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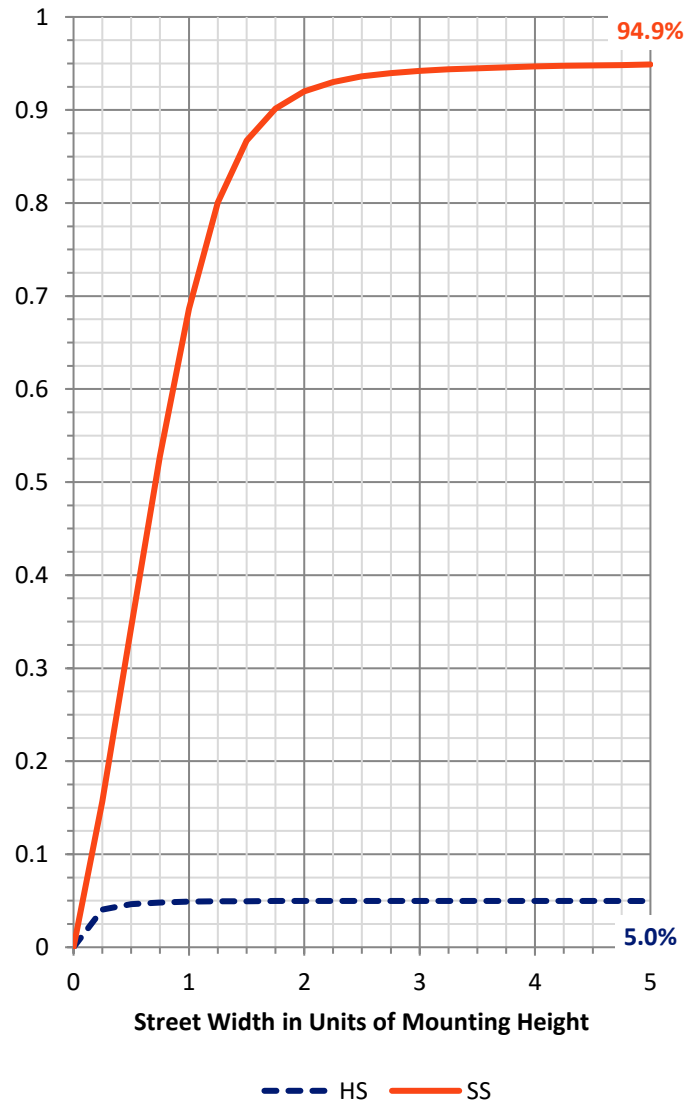
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	146.2	0.0	146.2
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	2784.8	0.0	2784.8
	% Fixture	95.0	0.0	95.0
Total	Lumens	2931.0	0.0	2931.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.8	1.1
10°-20°	113.7	3.9
20°-30°	217.0	7.4
30°-40°	389.3	13.3
40°-50°	596.5	20.4
50°-60°	693.3	23.7
60°-70°	613.9	20.9
70°-80°	264.8	9.0
80°-90°	10.6	0.4
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°	2931.0	100.0
0°-180°	2931.0	100.0

Coefficient of Utilization



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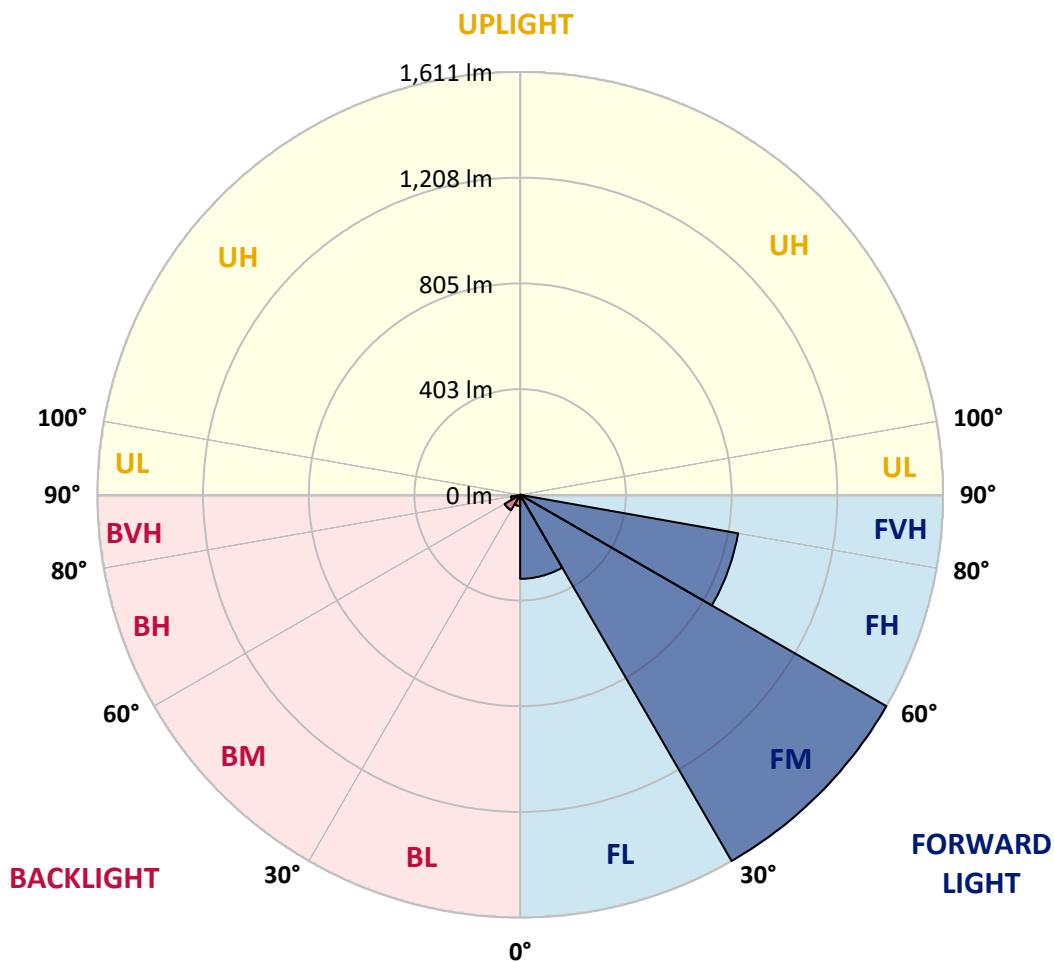
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	320.1	10.9			
FM	(30°-60°)	1610.9	55.0			
FH	(60°-80°)	843.3	28.8			G1/1800
FVH	(80°-90°)	10.5	0.4			G1/100
BL	(0°-30°)	42.5	1.4	B0/110		
BM	(30°-60°)	68.2	2.3	B0/220		
BH	(60°-80°)	35.4	1.2	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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7
2.5°	449.3	444.8	440.4	435.4	424.0	404.3	379.7	353.1	320.2	314.5	287.9
5°	545.5	543.6	539.1	532.2	519.5	498.0	470.2	430.9	375.9	366.4	310.1
7.5°	613.2	611.9	608.1	599.9	588.5	567.0	537.9	495.5	431.6	420.8	337.9
10°	673.9	673.3	670.1	662.5	651.1	627.7	596.7	552.4	484.7	472.7	370.2
12.5°	729.0	729.6	728.3	724.5	716.3	694.2	658.7	610.6	536.0	522.7	408.8
15°	761.2	763.1	768.2	775.8	778.3	760.6	723.9	670.7	588.5	577.1	453.1
17.5°	750.5	752.4	768.2	794.1	818.8	821.3	788.4	727.7	640.4	629.0	496.7
20°	724.5	727.1	743.5	779.0	827.0	860.6	847.3	789.7	689.7	675.8	538.5
22.5°	753.6	753.6	758.7	780.2	823.9	876.4	894.1	851.7	740.4	723.3	580.3
25°	853.6	851.7	841.0	832.1	846.0	892.9	929.6	915.0	799.8	780.2	624.6
27.5°	980.2	989.0	968.8	936.5	904.9	925.1	961.2	977.6	865.6	845.4	670.1
30°	1121.9	1125.7	1101.7	1058.6	1003.0	983.3	998.5	1031.4	937.1	915.0	717.6
32.5°	1249.7	1246.6	1226.3	1181.4	1112.4	1070.0	1046.6	1074.5	1015.0	989.7	766.3
35°	1363.0	1365.5	1340.9	1289.0	1221.3	1176.3	1120.7	1123.2	1102.3	1073.2	822.6
37.5°	1464.9	1460.5	1437.0	1385.2	1323.8	1275.1	1216.2	1173.8	1197.9	1167.5	885.9
40°	1547.8	1543.4	1518.7	1468.1	1410.5	1370.6	1324.4	1241.5	1298.5	1263.7	953.6
42.5°	1613.6	1608.5	1587.6	1538.9	1483.2	1447.8	1425.7	1325.0	1406.0	1371.2	1029.5
45°	1645.9	1641.4	1628.8	1592.1	1543.4	1512.3	1523.1	1421.2	1521.2	1492.1	1113.1
47.5°	1607.9	1606.0	1620.6	1614.2	1586.4	1569.9	1607.3	1526.3	1642.1	1613.6	1209.2
50°	1492.7	1495.9	1538.3	1590.8	1604.1	1623.7	1676.2	1637.0	1771.8	1741.4	1320.0
52.5°	1208.6	1230.1	1357.9	1484.5	1582.6	1656.6	1757.2	1795.2	1983.1	1953.4	1492.7
55°	902.3	911.2	1050.4	1266.8	1495.9	1654.1	1817.3	1888.2	2087.5	2057.2	1538.3
57.5°	715.7	718.8	787.8	1008.7	1317.4	1597.1	1849.0	1921.8	2133.1	2107.8	1606.0
60°	561.9	565.7	615.7	767.6	1066.2	1443.4	1803.4	1950.9	2222.3	2202.1	1724.3
62.5°	437.3	441.0	471.4	560.6	799.8	1206.7	1711.7	1997.7	2391.9	2382.4	1918.0
65°	338.5	339.8	360.7	402.4	565.1	950.4	1599.7	2041.4	2621.0	2612.8	2074.9
67.5°	249.9	251.8	266.4	292.3	381.6	682.8	1416.2	2007.8	2793.7	2769.7	2131.8
69°	201.9	203.8	216.4	237.3	301.2	537.9	1248.5	1924.9	2819.7	2796.9	2095.8
70°	172.7	174.0	186.7	204.4	256.9	456.9	1115.6	1853.4	2785.5	2763.4	2013.5
72.5°	110.7	117.1	129.7	141.1	170.2	302.5	753.0	1537.0	2403.3	2365.3	1576.9
75°	61.4	63.3	86.1	100.0	113.3	196.8	418.9	958.7	1528.8	1502.2	843.5
77.5°	50.6	51.9	60.7	75.9	75.9	110.1	158.2	377.8	581.5	524.6	228.4
80°	35.4	36.7	46.2	50.0	54.4	62.0	51.3	82.9	89.9	79.7	34.2
82.5°	24.7	25.9	31.6	41.1	43.7	29.1	19.0	24.7	25.9	25.9	13.3
85°	4.4	6.3	23.4	34.2	25.9	8.9	10.8	8.9	8.2	8.9	3.2
87.5°	0.0	0.0	14.6	16.5	13.9	3.8	4.4	3.2	1.9	2.5	1.3
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°	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7
2.5°	274.6	261.3	238.6	222.1	208.2	197.4	193.0	186.0	181.0	183.5	180.3
5°	282.2	258.8	222.1	198.7	182.2	168.3	156.9	148.1	141.1	139.8	138.6
7.5°	294.2	260.7	212.6	183.5	158.8	137.3	119.6	106.3	96.2	96.2	92.4
10°	310.7	265.8	206.9	168.3	131.6	102.5	84.8	72.1	67.1	66.4	65.2
12.5°	333.5	275.3	202.5	148.7	102.5	74.7	63.9	59.5	57.6	57.0	56.3
15°	364.5	289.2	197.4	124.7	77.8	61.4	57.0	53.2	51.3	50.6	50.0
17.5°	394.2	301.8	186.7	100.0	63.3	55.7	50.6	47.5	44.9	44.3	44.3
20°	422.1	312.6	168.3	77.8	57.0	50.0	44.9	41.1	38.6	38.0	38.0
22.5°	451.2	321.5	145.5	63.3	51.9	44.3	39.2	35.4	32.9	32.3	31.6
25°	482.2	327.8	119.6	56.3	46.8	39.2	33.5	30.4	28.5	27.8	27.2
27.5°	515.7	330.3	94.9	51.3	41.1	34.2	29.1	25.9	24.7	24.0	24.0
30°	546.1	327.8	73.4	45.6	36.1	29.7	25.3	22.8	21.5	20.9	20.9
32.5°	577.7	321.5	58.8	40.5	31.6	25.3	21.5	19.6	19.0	18.4	18.4
35°	611.3	313.2	50.6	36.1	27.2	22.1	19.0	17.7	17.1	16.5	16.5
37.5°	650.5	303.1	46.2	32.3	24.0	19.6	16.5	15.8	15.2	15.2	15.2
40°	694.8	290.4	43.0	29.1	21.5	17.1	14.6	13.9	13.3	13.3	13.3
42.5°	741.6	275.9	39.9	25.9	19.0	14.6	12.7	12.7	12.0	12.0	11.4
45°	794.1	261.3	36.7	22.8	16.5	12.7	10.8	10.1	10.1	9.5	9.5
47.5°	856.2	248.1	33.5	20.2	14.6	10.8	9.5	8.9	8.2	7.6	7.6
50°	943.5	246.8	29.7	17.7	13.3	8.9	7.6	7.0	6.3	5.7	5.7
52.5°	1030.2	235.4	25.3	14.6	10.8	7.6	5.7	5.1	4.4	4.4	3.8
55°	1049.8	216.4	22.1	12.7	8.2	5.7	4.4	3.2	3.2	2.5	2.5
57.5°	1092.8	207.6	19.0	10.1	6.3	4.4	2.5	1.9	1.9	1.9	1.9
60°	1177.6	205.0	16.5	8.9	4.4	3.2	1.9	1.3	1.3	0.6	0.6
62.5°	1294.7	202.5	13.9	7.6	3.2	1.9	1.3	0.6	0.0	0.0	0.0
65°	1359.2	185.4	11.4	5.7	2.5	1.9	0.6	0.0	0.0	0.0	0.0
67.5°	1342.1	153.1	10.1	3.8	1.9	1.3	0.6	0.0	0.0	0.0	0.0
69°	1270.6	129.1	8.2	3.2	1.9	1.3	0.6	0.0	0.0	0.0	0.0
70°	1184.6	111.4	7.6	2.5	1.3	0.6	0.6	0.0	0.0	0.0	0.0
72.5°	841.0	58.2	5.1	1.9	1.3	0.6	0.0	0.0	0.0	0.0	0.0
75°	393.0	25.9	3.2	1.3	0.6	0.6	0.0	0.0	0.0	0.0	0.0
77.5°	86.7	12.0	1.9	1.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	16.5	4.4	1.3	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	5.7	1.9	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.9	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	0.0	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)