

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: P214947

Luminaire Tested: **ARCH-AF16-30-D-U-T4W-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214947
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-AF16-30-D-U-T4W-7050-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2674 lumens
Efficiency: N/A
Efficacy: 83.6 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): 32
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

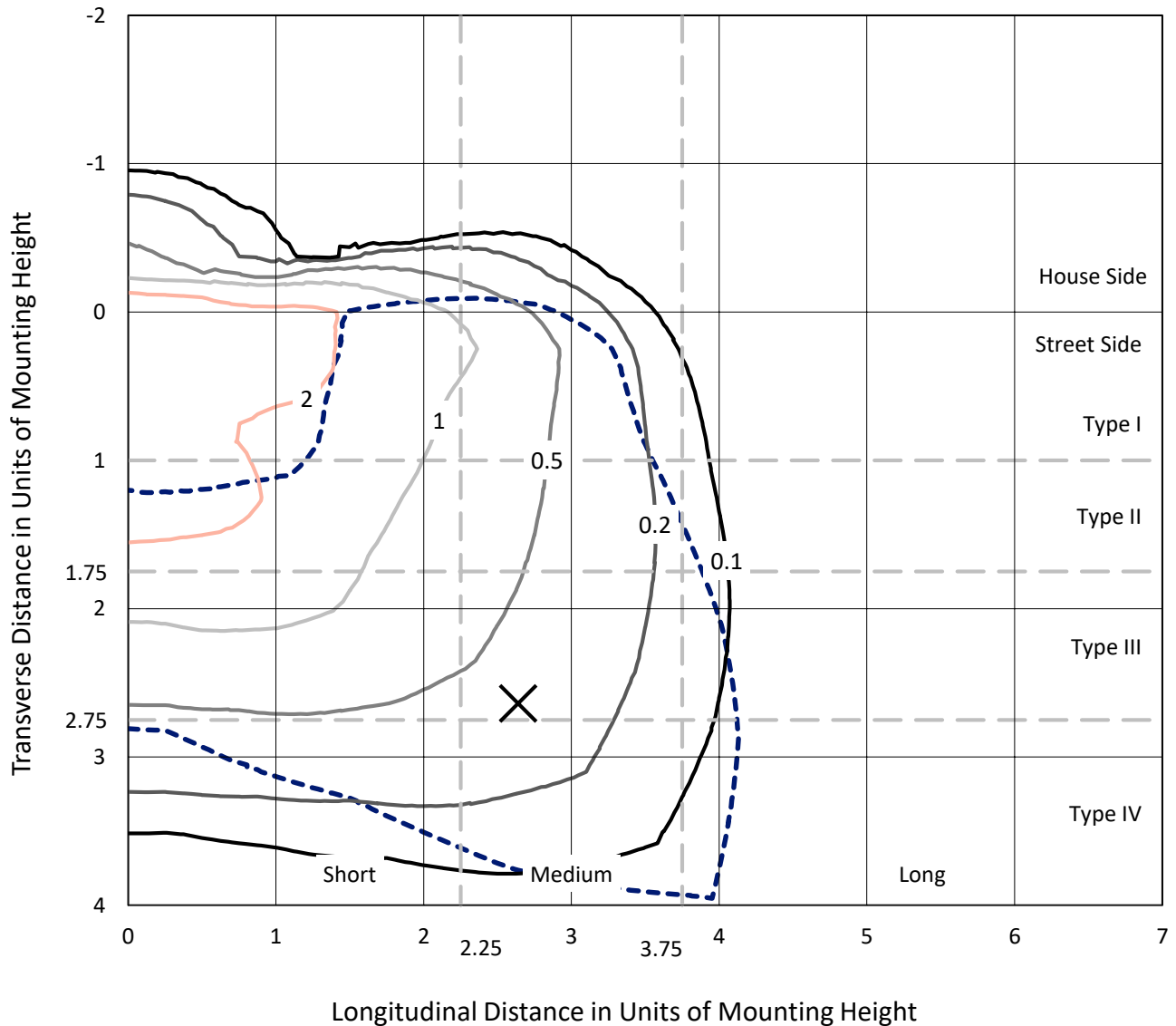


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

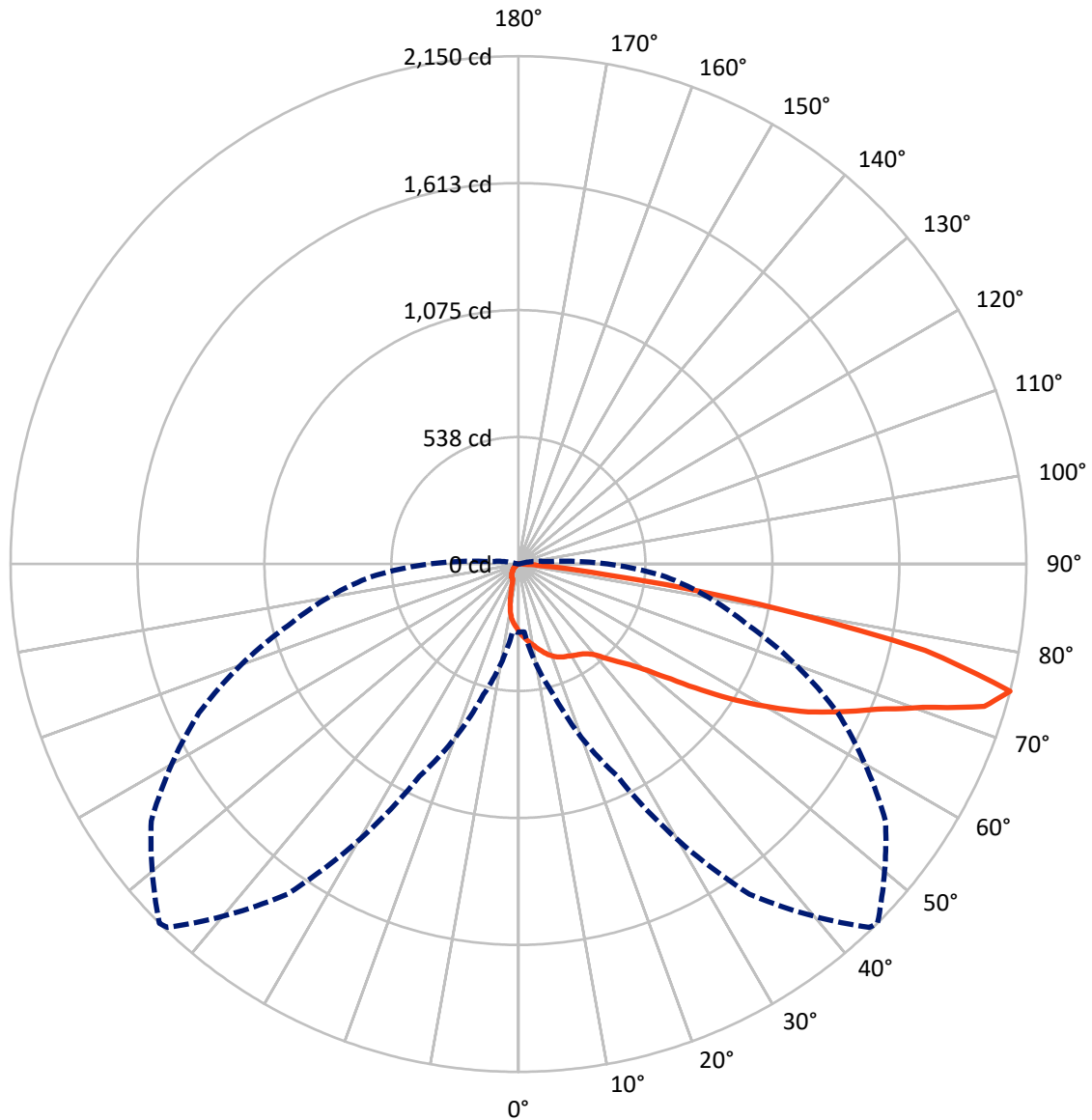


Based on 10 foot mounting height. Maximum calculated value = 3.8 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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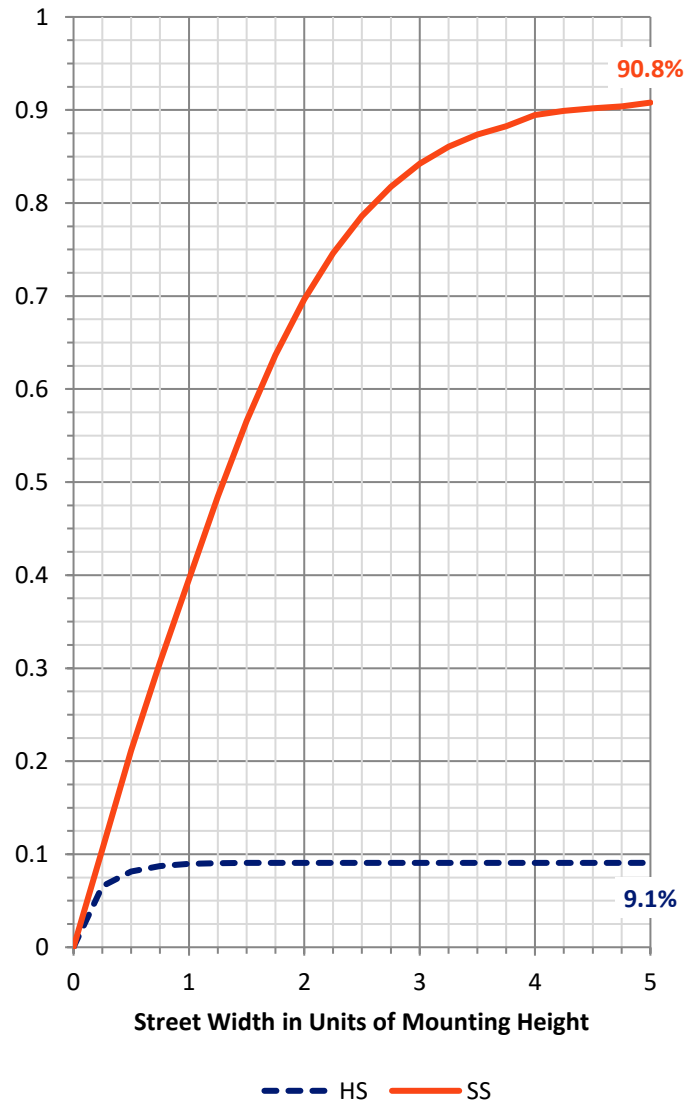
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	244.6	0.0	244.6
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	2429.4	0.0	2429.4
	% Fixture	90.9	0.0	90.9
Total	Lumens	2674.0	0.0	2674.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.0	1.0
10°-20°	76.5	2.9
20°-30°	126.6	4.7
30°-40°	183.3	6.9
40°-50°	300.1	11.2
50°-60°	534.7	20.0
60°-70°	786.1	29.4
70°-80°	593.1	22.2
80°-90°	46.5	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°	2674.0	100.0
0°-180°	2674.0	100.0



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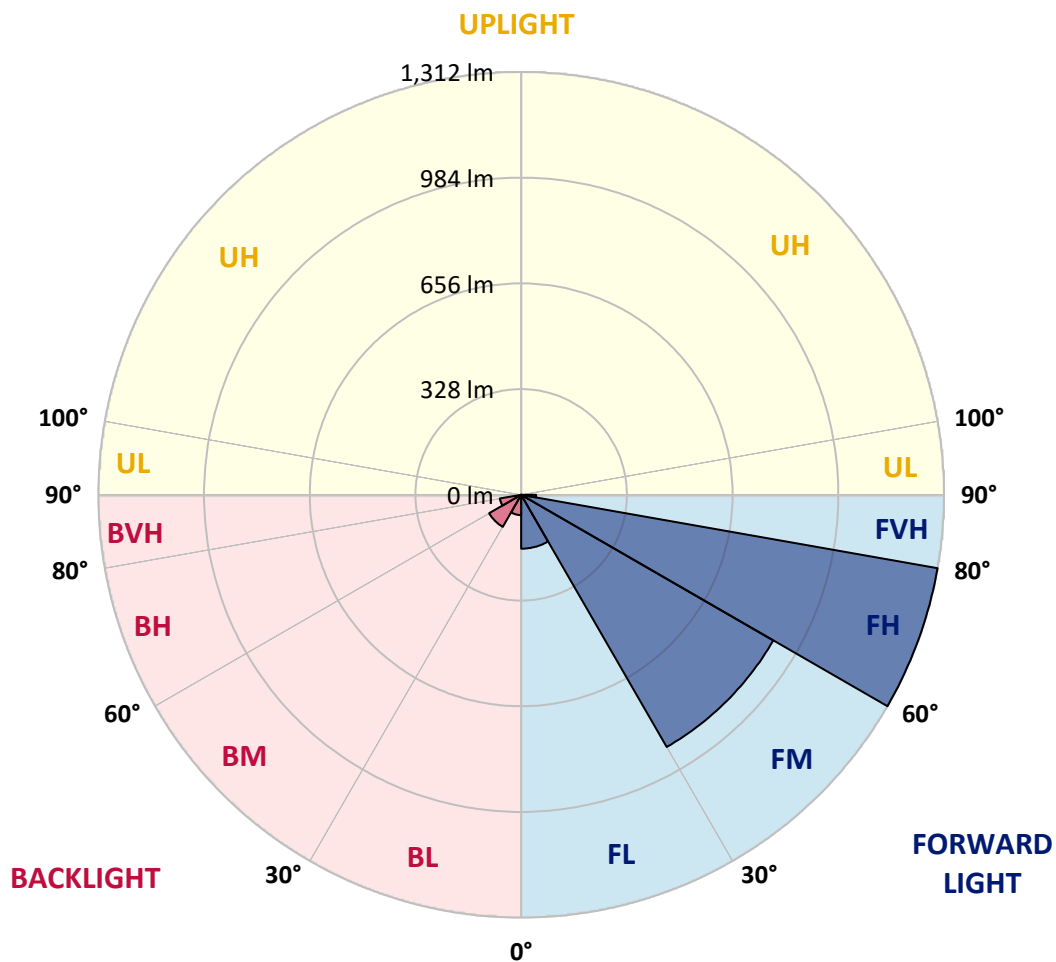
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	167.3	6.3			
FM	(30°-60°)	903.5	33.8			
FH	(60°-80°)	1312.2	49.1			G1/1800
FVH	(80°-90°)	46.4	1.7			G1/100
BL	(0°-30°)	62.9	2.4	B0/110		
BM	(30°-60°)	114.6	4.3	B0/220		
BH	(60°-80°)	67.0	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	286.0	286.0	286.0	286.0	286.0	286.0	286.0	286.0	286.0	286.0	286.0
2.5°	310.7	310.7	310.0	309.4	306.2	303.1	302.5	300.6	294.9	291.1	287.3
5°	336.6	337.3	336.0	332.8	325.9	318.9	318.3	313.2	302.5	294.9	286.6
7.5°	361.3	362.6	359.4	353.7	345.5	335.4	334.7	325.2	311.3	300.6	288.5
10°	382.2	382.2	377.7	370.8	361.9	351.2	349.9	339.1	323.3	310.0	294.2
12.5°	405.0	404.3	398.0	388.5	378.4	368.3	367.6	354.3	339.1	322.1	302.5
15°	425.8	424.6	416.3	407.5	396.7	386.0	385.3	372.1	356.2	336.0	314.5
17.5°	437.2	436.6	429.0	420.1	411.3	403.1	402.4	388.5	371.4	350.5	326.5
20°	439.1	439.8	433.4	425.8	420.8	416.3	416.3	403.7	385.3	363.2	339.1
22.5°	439.8	441.7	437.2	427.1	425.8	426.5	427.7	417.6	398.6	377.7	352.4
25°	444.2	446.7	443.6	431.5	430.3	434.7	436.0	431.5	414.4	393.6	367.6
27.5°	453.0	455.6	453.0	437.9	436.0	440.4	441.7	444.2	431.5	408.8	383.4
30°	470.8	471.4	465.7	446.7	442.9	448.6	450.5	457.5	447.3	423.3	398.6
32.5°	501.8	495.4	478.4	453.0	449.9	456.2	458.1	465.7	461.9	437.2	414.4
35°	565.0	532.1	492.9	461.9	458.7	465.1	467.6	478.4	480.3	456.8	434.1
37.5°	564.4	534.7	527.1	479.0	474.6	479.0	482.1	495.4	503.0	482.8	462.5
40°	604.3	591.6	591.6	511.3	496.7	503.0	506.2	519.5	532.8	516.9	496.1
42.5°	729.6	721.3	712.5	573.3	527.7	545.4	547.3	555.5	571.4	566.3	541.6
45°	869.4	861.8	827.6	678.3	580.9	584.0	588.4	601.7	624.5	634.0	604.9
47.5°	978.8	971.3	942.2	804.8	663.7	635.9	635.9	661.8	697.3	721.3	693.5
50°	1066.8	1057.9	1040.2	939.6	799.8	710.6	706.8	737.1	789.7	827.0	808.0
52.5°	1152.2	1126.3	1115.5	1078.8	953.5	818.8	808.6	830.2	902.9	949.1	933.3
55°	1209.2	1205.4	1194.0	1206.6	1114.9	950.4	941.5	945.9	1037.1	1068.1	1048.5
57.5°	1262.3	1261.7	1287.0	1345.8	1290.8	1101.0	1087.0	1080.1	1166.8	1159.2	1176.3
60°	1328.1	1316.7	1375.6	1459.7	1452.1	1247.8	1231.9	1218.0	1266.1	1244.6	1329.4
62.5°	1331.3	1328.1	1447.7	1568.6	1612.2	1397.1	1378.7	1328.8	1352.8	1328.1	1475.6
65°	1210.4	1226.3	1478.1	1626.1	1746.4	1528.1	1505.9	1428.1	1430.0	1413.5	1647.7
67.5°	1183.2	1191.5	1394.6	1688.2	1843.2	1660.3	1639.4	1542.6	1519.8	1521.1	1749.5
70°	1115.5	1128.2	1290.8	1683.7	1919.7	1836.8	1816.0	1710.9	1655.9	1594.5	1671.1
72.5°	852.3	873.8	1087.7	1476.2	1898.9	2067.8	2062.1	1924.2	1710.3	1464.2	1264.2
75°	288.5	287.9	571.4	991.5	1705.9	2138.7	2150.1	1897.6	1492.0	1009.9	627.7
77.5°	62.0	62.6	117.7	401.8	1133.2	1717.3	1760.9	1431.3	962.4	449.9	143.6
80°	30.4	31.0	48.7	106.3	453.0	963.0	1031.4	735.9	355.6	89.8	24.0
82.5°	15.2	15.8	25.3	56.3	167.7	342.3	365.7	270.8	101.9	50.6	12.0
85°	5.7	5.7	12.7	33.5	76.6	80.4	98.7	78.5	61.4	41.1	3.2
87.5°	1.3	1.3	7.0	16.5	34.2	25.3	25.3	24.0	37.3	27.8	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°	286.0	286.0	286.0	286.0	286.0	286.0	286.0	286.0	286.0	286.0	286.0
2.5°	285.4	282.8	278.4	274.0	270.8	267.0	265.1	263.2	262.6	262.0	263.2
5°	282.2	278.4	270.2	263.2	256.9	251.8	248.0	244.2	242.3	241.1	241.7
7.5°	282.2	276.5	264.5	253.7	243.6	232.8	222.1	213.9	207.5	203.7	204.4
10°	285.4	277.8	262.0	247.4	228.4	205.6	182.2	164.5	152.5	145.5	145.5
12.5°	292.3	282.2	262.6	239.8	207.5	167.7	132.2	110.7	101.9	96.8	97.4
15°	301.8	289.8	265.8	229.7	178.4	124.6	92.4	78.5	78.5	79.7	80.4
17.5°	312.6	299.3	268.3	214.5	141.1	89.2	72.8	71.5	73.4	76.6	76.6
20°	323.3	308.8	269.5	190.5	105.7	70.9	69.0	69.0	70.2	73.4	74.0
22.5°	336.6	320.8	268.3	160.7	79.1	67.1	66.4	66.4	66.4	70.2	70.2
25°	350.5	334.7	263.2	129.1	67.1	64.5	63.9	63.3	63.3	66.4	67.1
27.5°	366.4	349.3	251.2	98.7	63.3	62.0	61.4	60.1	60.1	62.6	62.6
30°	382.2	365.7	232.8	74.7	60.1	59.5	58.2	56.9	55.7	58.2	58.2
32.5°	399.3	382.8	208.8	59.5	55.7	55.7	55.0	53.2	51.9	53.2	53.8
35°	422.0	402.4	181.6	51.9	50.0	50.0	50.0	49.4	46.8	48.1	48.1
37.5°	452.4	429.6	150.0	48.1	45.6	44.3	44.3	44.3	42.4	43.0	43.0
40°	491.0	461.3	119.6	44.9	42.4	39.2	38.0	38.6	37.3	37.3	36.7
42.5°	543.5	495.4	89.8	42.4	39.9	35.4	32.9	32.3	31.0	30.4	30.4
45°	618.8	537.2	64.5	39.9	38.0	31.0	28.5	26.6	23.4	21.5	21.5
47.5°	716.3	584.7	48.1	37.3	36.1	27.2	24.0	20.2	15.8	14.6	14.6
50°	835.2	637.8	40.5	33.5	32.9	24.0	19.0	13.3	8.9	7.6	8.2
52.5°	951.0	687.8	36.1	29.7	29.1	20.9	13.9	7.0	3.8	3.8	3.8
55°	1048.5	723.2	32.9	26.6	25.3	16.5	7.6	3.2	1.9	1.9	1.9
57.5°	1136.4	743.5	29.7	23.4	20.2	11.4	3.2	1.3	1.3	0.6	0.6
60°	1216.8	755.5	25.9	20.2	15.8	6.3	1.3	0.6	0.6	0.0	0.0
62.5°	1295.9	764.4	22.1	16.5	12.0	2.5	0.6	0.6	0.0	0.0	0.0
65°	1356.0	761.2	17.7	13.3	7.6	1.3	0.6	0.0	0.0	0.0	0.0
67.5°	1354.1	718.2	13.3	10.1	3.8	0.6	0.0	0.0	0.0	0.0	0.0
70°	1211.1	604.9	8.9	6.3	1.3	0.6	0.0	0.0	0.0	0.0	0.0
72.5°	859.3	387.9	5.7	3.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0
75°	378.4	117.7	3.2	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	74.0	27.2	1.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	17.7	3.2	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	7.6	1.3	0.0	0.0	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°	1.3	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)