

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: P397812

Luminaire Tested: **ARCH-S-PA1-40-830-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397812
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-40-830-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3415 lumens
Efficiency: N/A
Efficacy: 85.4 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

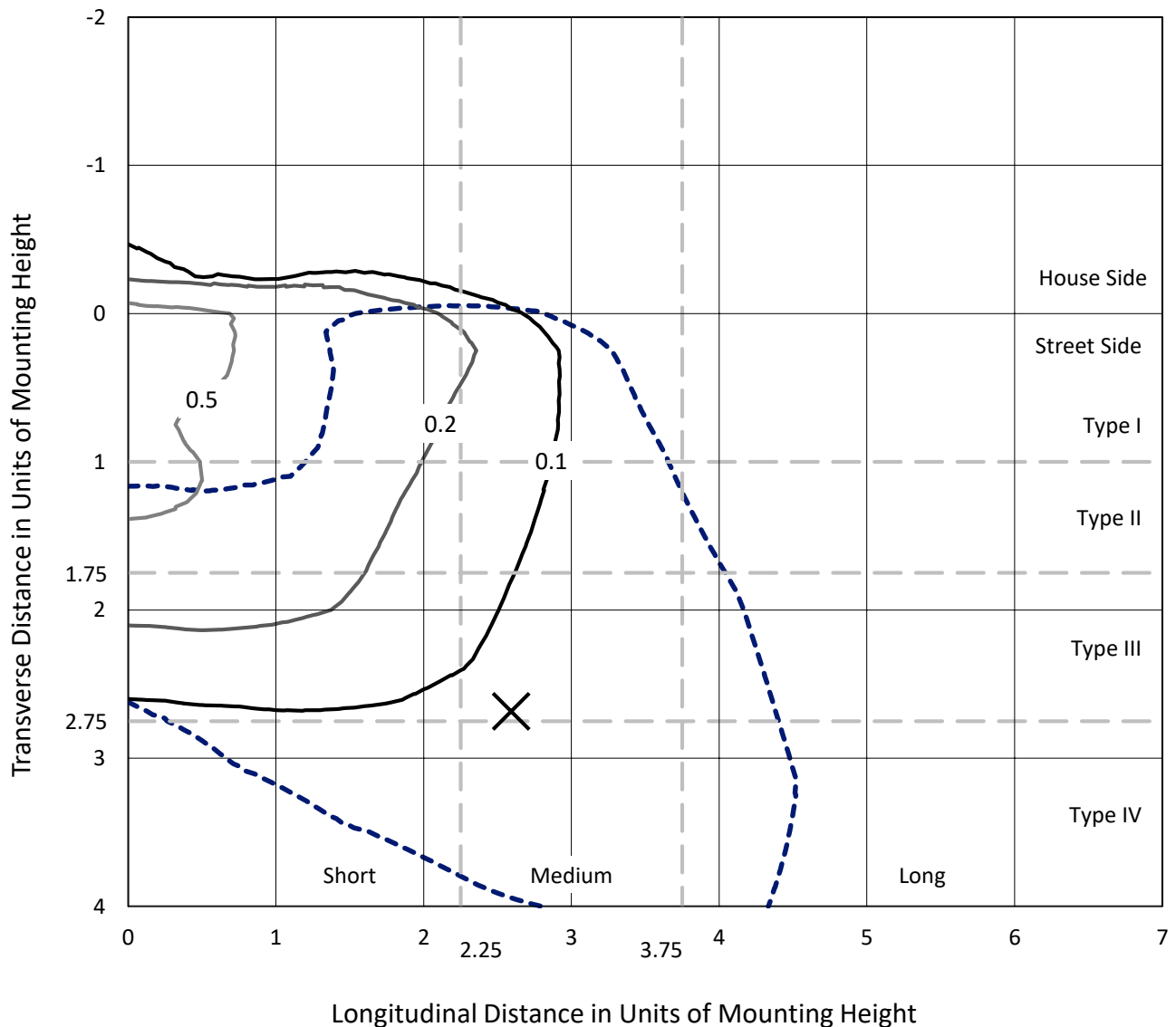
Input Watts (W): 40
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

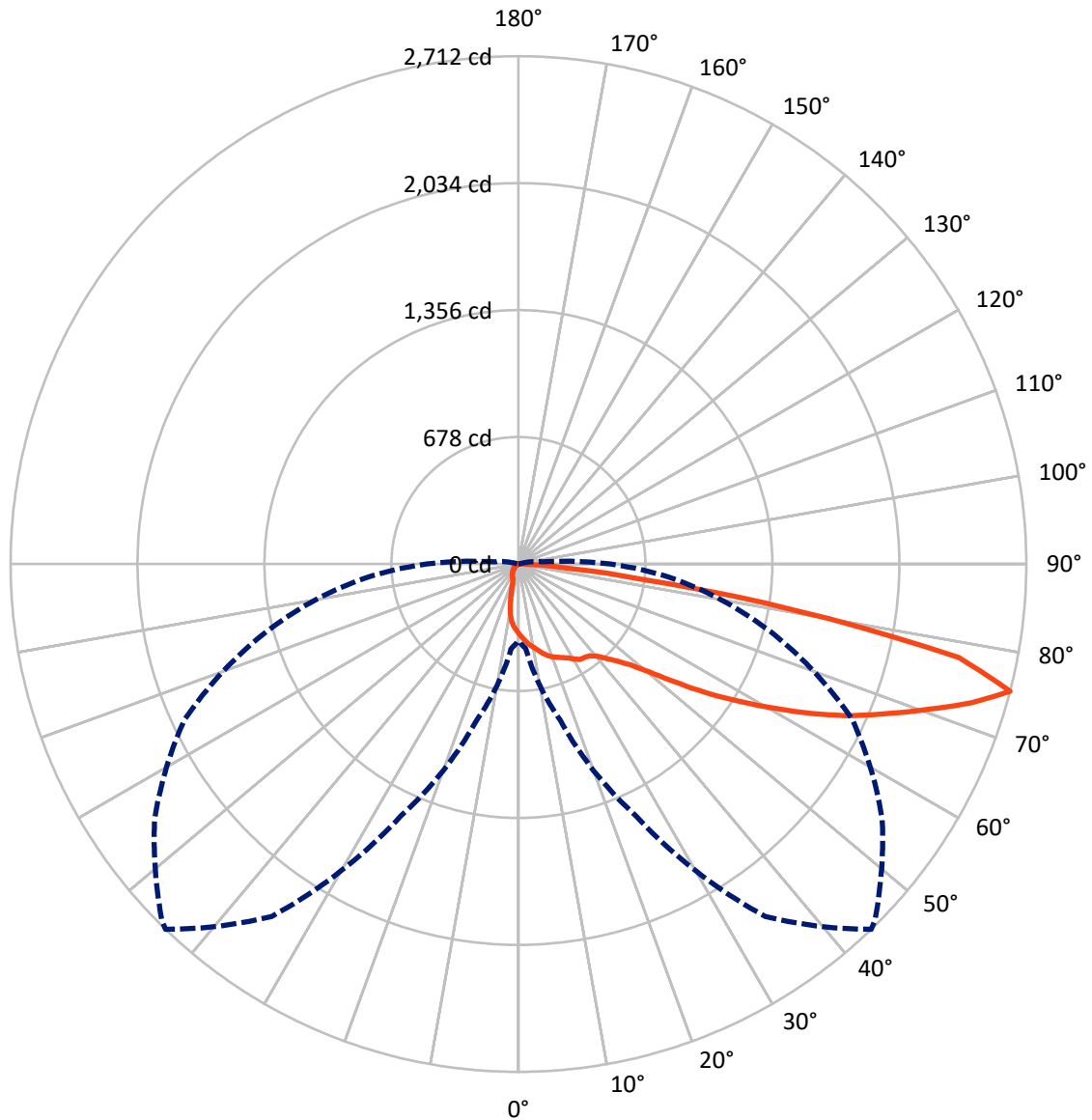


Based on 25 foot mounting height. Maximum calculated value = 0.8 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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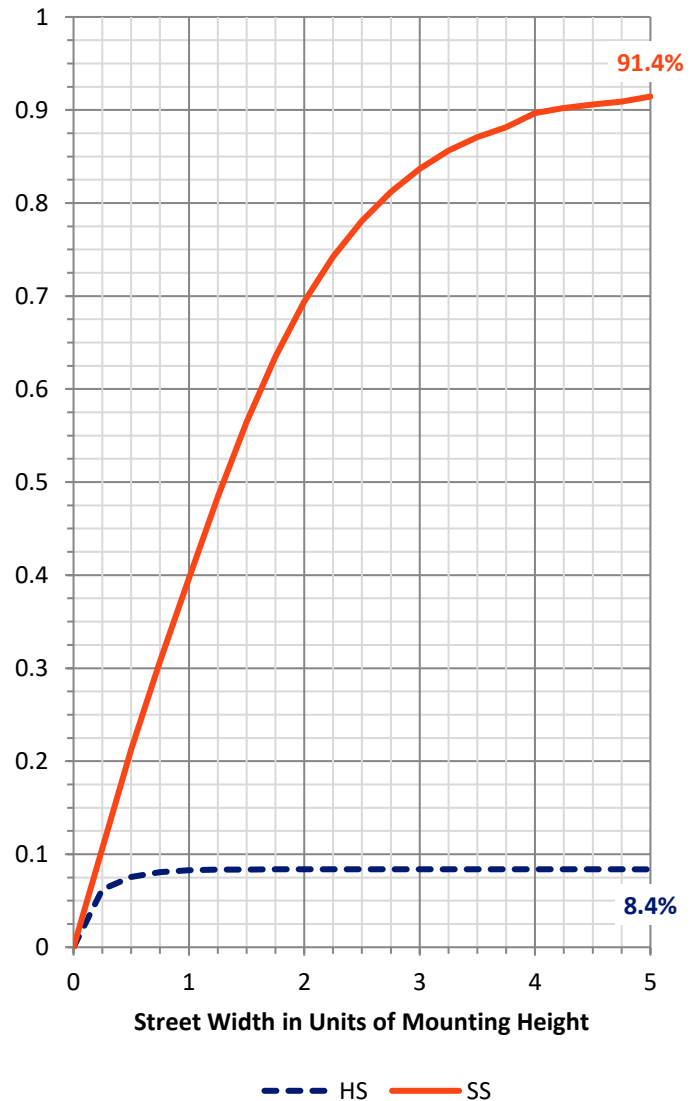
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	288.0	0.0	288.0
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	3127.0	0.0	3127.0
	% Fixture	91.6	0.0	91.6
Total	Lumens	3415.0	0.0	3415.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.1	1.0
10°-20°	98.2	2.9
20°-30°	162.1	4.7
30°-40°	235.3	6.9
40°-50°	382.5	11.2
50°-60°	674.2	19.7
60°-70°	969.0	28.4
70°-80°	776.0	22.7
80°-90°	82.7	2.4
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°	3415.0	100.0
0°-180°	3415.0	100.0



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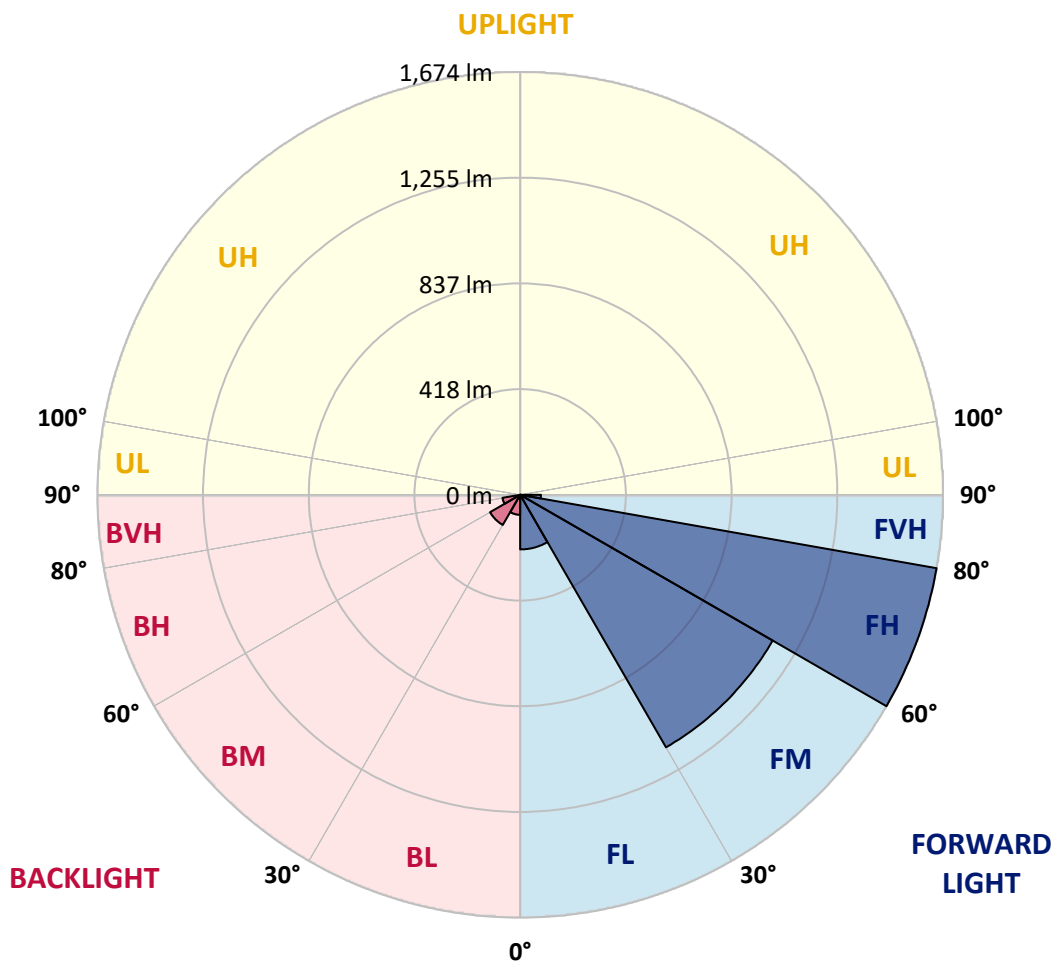
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	216.3	6.3			
FM	(30°-60°)	1154.3	33.8			
FH	(60°-80°)	1674.0	49.0			G1/1800
FVH	(80°-90°)	82.5	2.4			G1/100
BL	(0°-30°)	79.1	2.3	B0/110		
BM	(30°-60°)	137.7	4.0	B0/220		
BH	(60°-80°)	71.0	2.1	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 IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	371.7	371.7	371.7	371.7	371.7	371.7	371.7	371.7	371.7	371.7	371.7
2.5°	405.1	404.5	402.6	399.4	396.3	393.1	392.5	387.5	381.8	377.4	373.6
5°	441.0	440.4	437.2	430.3	423.4	415.2	414.6	402.6	391.9	379.9	369.8
7.5°	478.2	476.9	471.3	460.5	448.6	436.0	434.7	417.1	401.3	385.6	371.1
10°	507.2	505.9	497.7	485.1	468.7	453.0	451.1	432.8	417.1	396.9	377.4
12.5°	535.5	533.0	522.3	508.4	488.3	473.1	471.3	452.4	433.5	412.7	388.7
15°	562.0	558.8	548.7	531.1	509.7	495.2	493.9	473.8	454.2	430.3	403.8
17.5°	580.2	579.0	567.0	547.5	526.7	514.7	513.5	492.7	473.1	447.9	419.6
20°	589.7	589.7	578.4	556.9	538.0	529.8	528.0	508.4	489.5	465.6	436.0
22.5°	591.6	593.5	584.7	561.3	547.5	540.6	539.3	522.3	504.0	482.0	454.2
25°	595.4	595.4	591.0	565.8	555.7	553.8	553.2	538.0	521.7	499.6	472.5
27.5°	599.8	599.8	596.6	572.1	568.3	567.6	567.0	560.1	546.9	521.0	493.9
30°	611.1	611.7	609.2	584.7	582.1	589.1	590.3	586.5	570.2	538.0	516.0
32.5°	639.5	633.8	626.9	593.5	597.9	606.7	607.3	599.8	582.1	556.3	542.4
35°	710.7	677.3	645.8	601.0	602.9	611.7	613.0	612.4	601.7	579.6	572.7
37.5°	776.8	729.6	684.8	618.7	612.4	621.8	624.3	635.1	626.9	611.7	613.6
40°	815.2	797.0	765.5	667.2	631.3	645.8	648.3	664.7	661.5	655.2	667.2
42.5°	933.7	934.9	900.9	739.6	665.9	689.2	692.4	705.6	710.0	713.2	742.2
45°	1071.0	1075.4	1067.2	870.1	731.4	739.0	743.4	761.1	777.4	797.6	850.5
47.5°	1236.1	1232.3	1202.1	1029.4	845.5	803.3	806.4	840.4	868.8	912.9	988.5
50°	1382.3	1391.7	1334.4	1178.1	1006.1	904.7	901.6	934.9	986.0	1047.7	1142.9
52.5°	1529.7	1515.8	1438.3	1325.6	1196.4	1042.7	1033.2	1051.5	1123.3	1196.4	1294.1
55°	1568.7	1570.0	1543.5	1486.8	1355.2	1210.3	1194.5	1193.3	1282.7	1332.5	1452.8
57.5°	1645.6	1648.8	1655.1	1666.4	1604.0	1377.8	1361.5	1343.8	1430.8	1459.7	1612.2
60°	1723.7	1727.5	1765.9	1827.0	1785.5	1558.7	1541.0	1499.4	1548.0	1587.0	1779.8
62.5°	1713.6	1740.1	1851.6	1973.2	1968.2	1757.1	1735.1	1634.9	1665.8	1699.8	1933.5
65°	1547.3	1575.7	1826.4	2013.5	2151.5	1953.1	1917.1	1774.8	1776.6	1817.6	2081.6
67.5°	1398.6	1429.5	1668.9	1996.5	2272.5	2128.8	2091.7	1915.3	1885.6	1953.7	2161.0
70°	1313.0	1343.8	1543.5	1943.6	2306.5	2323.5	2291.4	2075.9	2015.4	2077.8	2072.1
72.5°	1027.6	1076.1	1383.5	1842.8	2343.0	2532.0	2506.8	2279.4	2125.7	1948.0	1577.6
75°	409.5	454.2	863.8	1483.1	2297.0	2711.6	2692.1	2370.8	1967.5	1391.1	807.7
77.5°	123.5	132.3	240.0	733.3	1684.0	2404.1	2397.8	1993.4	1392.3	645.8	220.5
80°	41.0	45.4	73.7	202.2	768.6	1502.0	1530.3	1270.1	632.5	148.1	44.7
82.5°	17.0	18.9	37.2	81.3	272.2	647.0	637.6	568.9	220.5	92.0	16.4
85°	4.4	5.7	17.0	46.6	99.5	223.0	234.4	190.9	124.7	76.2	5.0
87.5°	0.0	0.0	8.2	18.9	44.7	67.4	70.6	58.0	70.6	57.3	2.5
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°	371.7	371.7	371.7	371.7	371.7	371.7	371.7	371.7	371.7	371.7	371.7
2.5°	370.4	367.3	361.6	357.8	352.8	351.5	349.0	345.9	345.2	342.1	342.7
5°	364.1	359.1	349.0	342.1	333.9	331.4	327.0	323.8	321.3	316.9	317.5
7.5°	362.9	355.3	341.5	328.2	315.0	305.6	292.3	281.6	272.8	263.3	265.2
10°	367.3	357.8	338.3	320.0	296.1	265.9	231.2	208.5	197.2	185.9	187.1
12.5°	376.1	364.8	339.6	311.9	263.3	211.7	163.8	132.9	124.7	119.7	120.3
15°	389.4	375.5	343.4	296.1	219.2	153.1	109.0	95.8	98.9	100.8	100.8
17.5°	403.2	387.5	346.5	267.8	169.5	107.1	88.8	87.6	92.0	96.4	96.4
20°	420.2	400.1	347.1	231.8	122.2	86.9	83.8	83.8	86.9	92.0	92.0
22.5°	436.6	413.9	341.5	190.9	93.2	80.6	80.6	80.6	82.5	87.6	88.2
25°	456.1	430.9	329.5	147.4	80.0	76.9	76.9	77.5	78.8	83.2	83.8
27.5°	476.9	448.6	309.3	107.7	73.1	72.5	73.1	73.7	74.3	78.8	80.0
30°	500.9	468.1	283.5	80.6	66.8	66.8	68.7	69.9	69.9	73.7	75.0
32.5°	528.6	493.9	252.6	66.8	60.5	59.9	63.0	64.9	64.9	68.0	69.3
35°	563.2	520.4	215.5	59.2	55.4	54.2	55.4	58.6	59.9	62.4	63.0
37.5°	609.2	551.9	175.8	54.8	51.7	49.1	49.1	49.8	52.3	54.8	55.4
40°	667.8	586.5	136.7	51.7	47.9	45.4	43.5	42.8	42.2	44.1	45.4
42.5°	741.5	625.6	102.1	48.5	44.7	41.0	38.4	35.9	32.8	32.1	32.8
45°	836.0	673.5	75.6	46.0	42.8	37.2	32.8	28.4	22.7	20.8	21.4
47.5°	947.5	723.3	59.2	43.5	41.6	32.8	27.1	19.5	13.9	12.6	13.2
50°	1066.0	771.1	50.4	40.3	39.1	28.4	19.5	12.0	8.2	8.2	8.8
52.5°	1166.8	798.2	46.0	37.8	35.3	23.3	12.6	6.9	5.0	5.0	5.7
55°	1264.4	812.7	42.8	35.3	30.2	16.4	6.9	4.4	3.2	3.2	3.2
57.5°	1365.2	819.0	39.1	32.1	23.9	10.1	3.8	2.5	1.9	1.9	1.9
60°	1454.7	807.1	33.4	26.5	15.8	5.0	1.9	1.9	1.3	0.6	0.6
62.5°	1529.7	784.4	23.3	18.9	9.5	2.5	1.3	0.6	0.0	0.0	0.0
65°	1575.7	747.8	15.1	12.6	5.7	1.9	0.6	0.0	0.0	0.0	0.0
67.5°	1562.4	679.2	9.5	8.2	2.5	1.3	0.6	0.0	0.0	0.0	0.0
70°	1410.0	556.9	6.9	5.0	1.9	0.6	0.0	0.0	0.0	0.0	0.0
72.5°	1016.2	376.7	5.0	3.2	1.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	488.9	134.2	3.2	2.5	0.6	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	119.7	29.6	1.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	26.5	5.7	1.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	8.8	2.5	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.2	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.9	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)