

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: P214953

Luminaire Tested: **ARCH-AF24-40-D-U-T4W-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214953
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-AF24-40-D-U-T4W-7050-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 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: 3617 lumens
Efficiency: N/A
Efficacy: 90.4 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

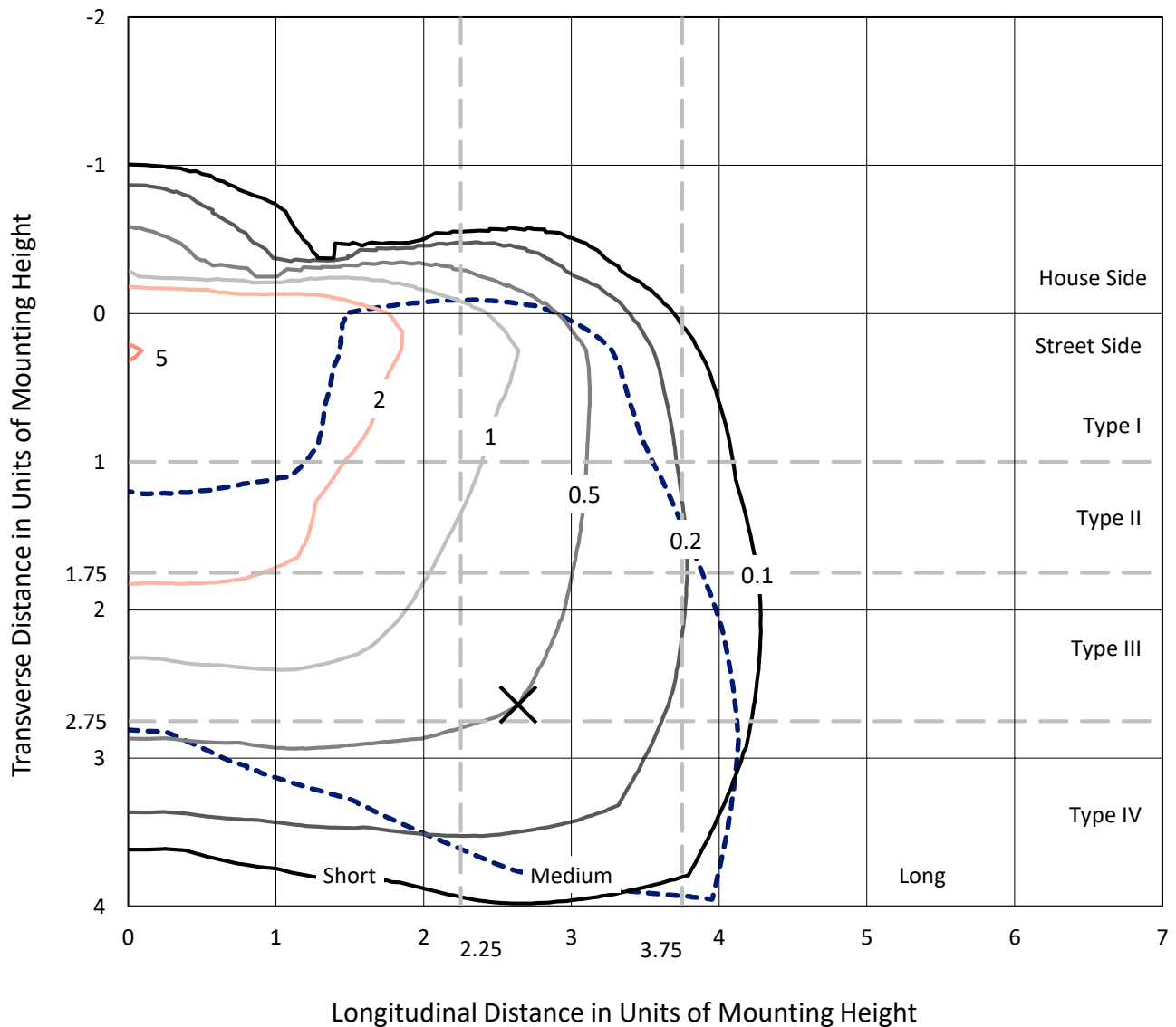


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

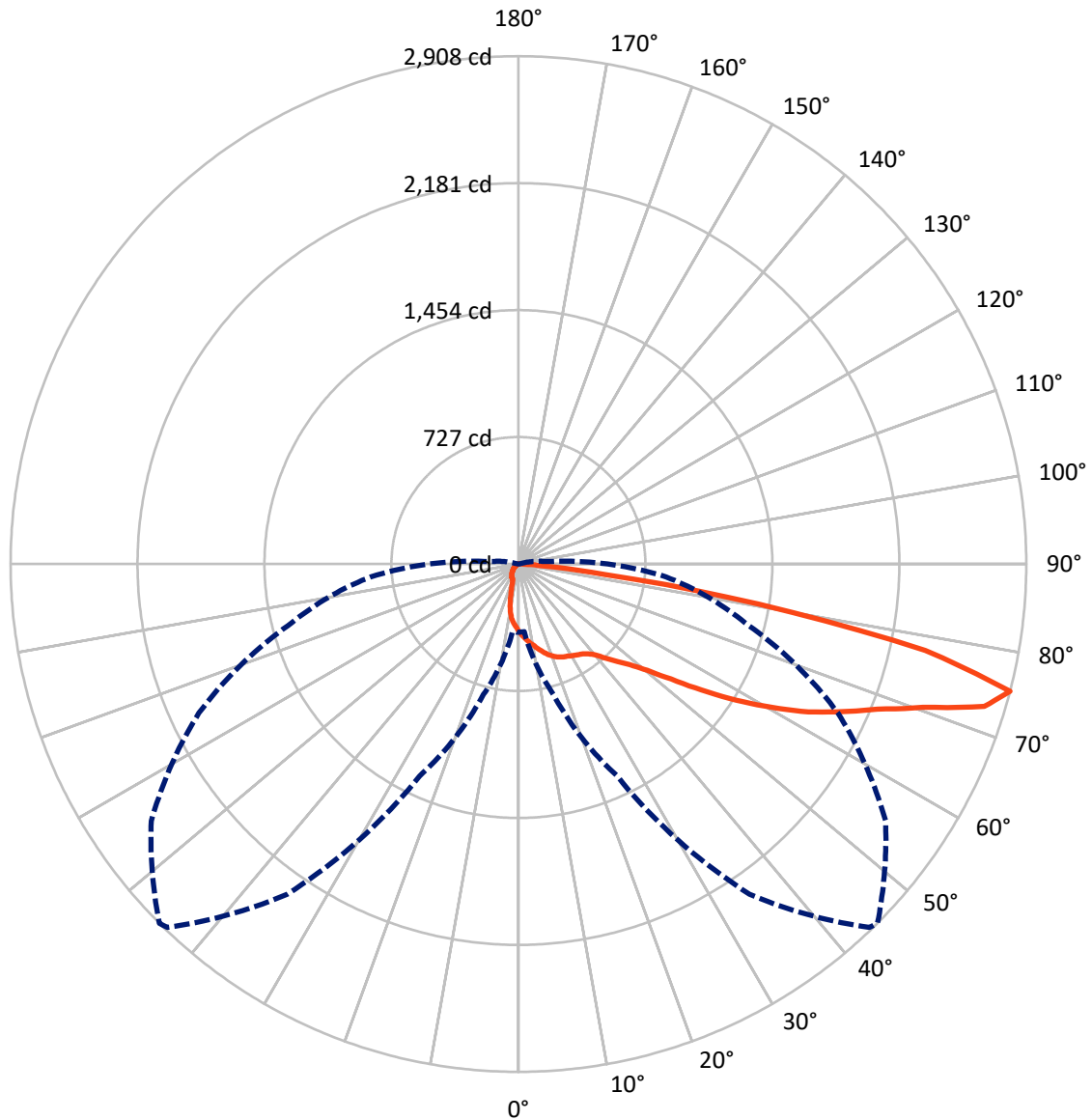


Based on 10 foot mounting height. Maximum calculated value = 5.2 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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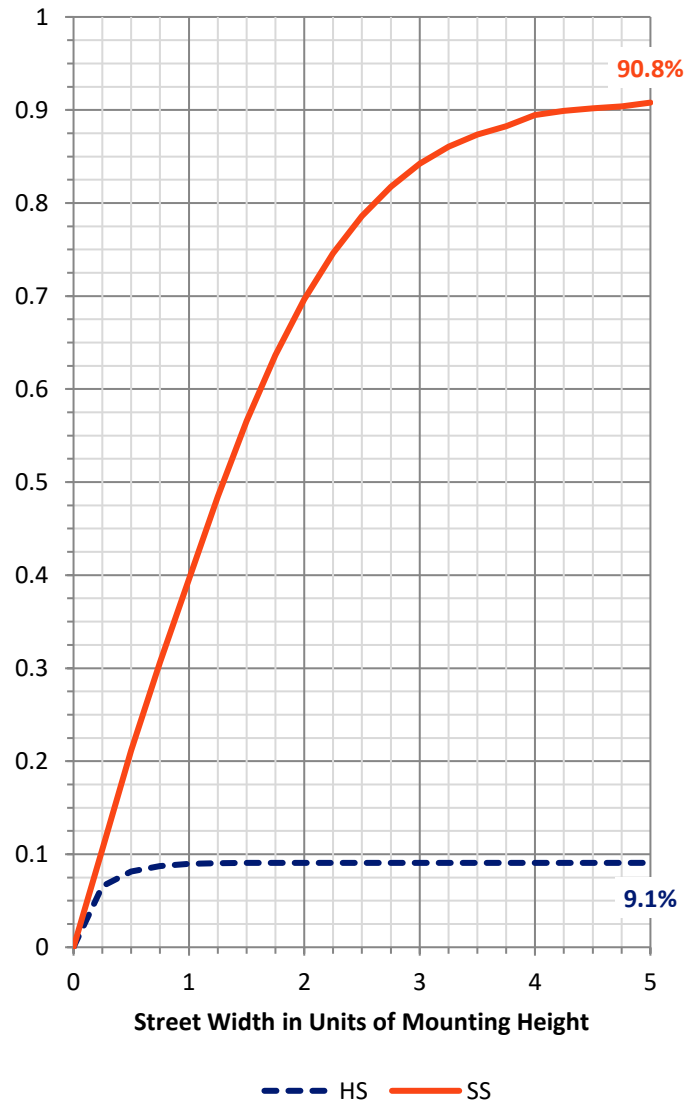
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	330.9	0.0	330.9
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	3286.2	0.0	3286.2
	% Fixture	90.9	0.0	90.9
Total	Lumens	3617.0	0.0	3617.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.5	1.0
10°-20°	103.4	2.9
20°-30°	171.3	4.7
30°-40°	247.9	6.9
40°-50°	406.0	11.2
50°-60°	723.3	20.0
60°-70°	1063.4	29.4
70°-80°	802.2	22.2
80°-90°	62.9	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°	3617.0	100.0
0°-180°	3617.0	100.0



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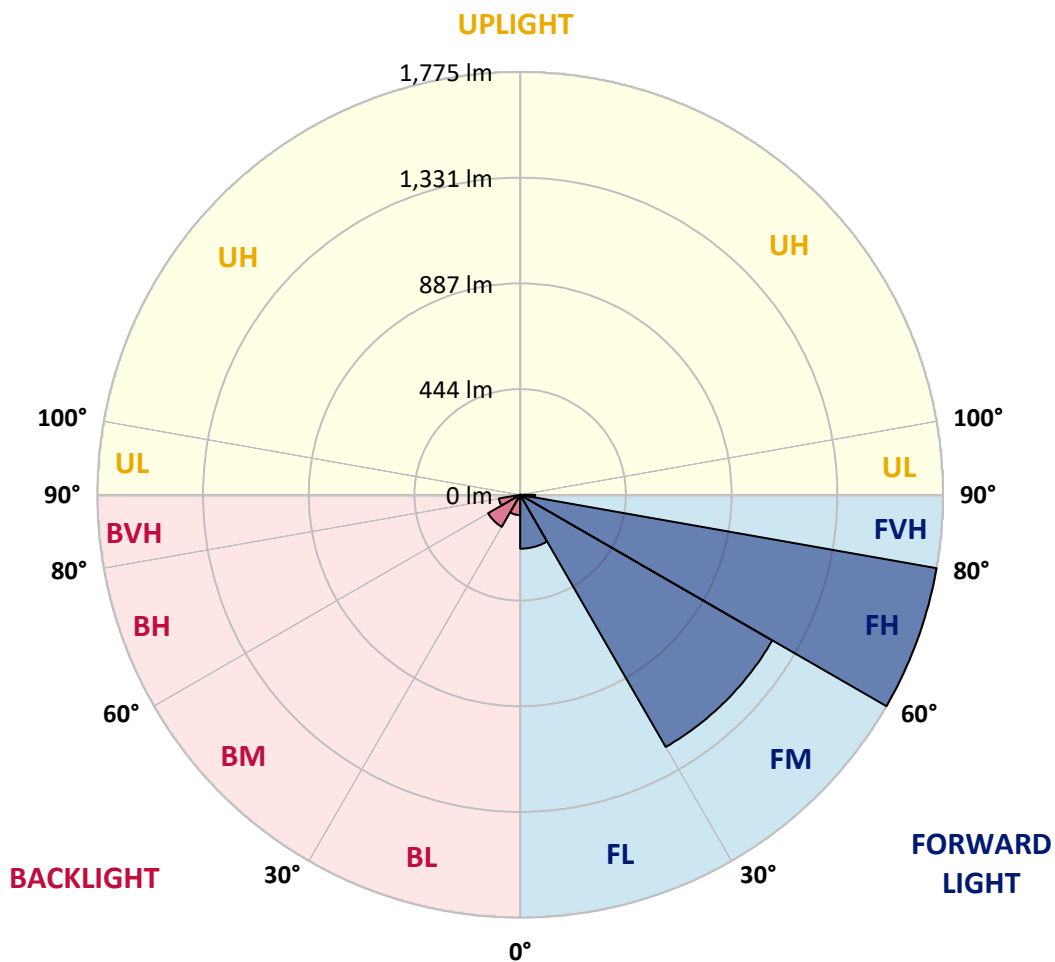
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	226.2	6.3			
FM	(30°-60°)	1222.2	33.8			
FH	(60°-80°)	1775.0	49.1			G1/1800
FVH	(80°-90°)	62.8	1.7			G1/100
BL	(0°-30°)	85.0	2.4	B0/110		
BM	(30°-60°)	155.0	4.3	B0/220		
BH	(60°-80°)	90.6	2.5	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°	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9
2.5°	420.2	420.2	419.4	418.5	414.2	410.0	409.1	406.5	398.8	393.7	388.6
5°	455.3	456.2	454.5	450.2	440.8	431.4	430.5	423.7	409.1	398.8	387.7
7.5°	488.7	490.4	486.1	478.4	467.3	453.6	452.8	439.9	421.1	406.5	390.3
10°	517.0	517.0	511.0	501.5	489.6	475.0	473.3	458.8	437.4	419.4	398.0
12.5°	547.8	546.9	538.3	525.5	511.8	498.1	497.3	479.3	458.8	435.6	409.1
15°	576.0	574.3	563.2	551.2	536.6	522.1	521.2	503.3	481.9	454.5	425.4
17.5°	591.4	590.6	580.3	568.3	556.3	545.2	544.3	525.5	502.4	474.2	441.6
20°	594.0	594.8	586.3	576.0	569.2	563.2	563.2	546.1	521.2	491.3	458.8
22.5°	594.8	597.4	591.4	577.7	576.0	576.9	578.6	564.9	539.2	511.0	476.7
25°	600.8	604.3	600.0	583.7	582.0	588.0	589.7	583.7	560.6	532.4	497.3
27.5°	612.8	616.2	612.8	592.3	589.7	595.7	597.4	600.8	583.7	552.9	518.7
30°	636.8	637.6	629.9	604.3	599.1	606.8	609.4	618.8	605.1	572.6	539.2
32.5°	678.7	670.2	647.0	612.8	608.5	617.1	619.7	629.9	624.8	591.4	560.6
35°	764.3	719.8	666.7	624.8	620.5	629.1	632.5	647.0	649.6	617.9	587.1
37.5°	763.4	723.2	712.9	647.9	641.9	647.9	652.2	670.2	680.4	653.0	625.6
40°	817.4	800.2	800.2	691.6	671.9	680.4	684.7	702.7	720.7	699.3	671.0
42.5°	986.8	975.7	963.7	775.4	713.8	737.8	740.3	751.5	772.9	766.0	732.6
45°	1176.0	1165.7	1119.5	917.5	785.7	790.0	796.0	813.9	844.8	857.6	818.2
47.5°	1324.0	1313.8	1274.4	1088.7	897.8	860.2	860.2	895.3	943.2	975.7	938.0
50°	1443.0	1431.0	1407.1	1271.0	1081.8	961.2	956.0	997.1	1068.1	1118.6	1093.0
52.5°	1558.6	1523.5	1508.9	1459.3	1289.8	1107.5	1093.8	1122.9	1221.3	1283.8	1262.4
55°	1635.6	1630.5	1615.0	1632.2	1508.1	1285.5	1273.5	1279.5	1402.8	1444.7	1418.2
57.5°	1707.5	1706.6	1740.9	1820.5	1746.0	1489.2	1470.4	1461.0	1578.2	1568.0	1591.1
60°	1796.5	1781.1	1860.7	1974.5	1964.2	1687.8	1666.4	1647.6	1712.6	1683.5	1798.2
62.5°	1800.8	1796.5	1958.3	2121.7	2180.8	1889.8	1865.0	1797.3	1829.9	1796.5	1995.9
65°	1637.3	1658.7	1999.3	2199.6	2362.2	2067.0	2037.0	1931.7	1934.3	1912.0	2228.7
67.5°	1600.5	1611.6	1886.4	2283.5	2493.2	2245.8	2217.6	2086.6	2055.8	2057.5	2366.5
70°	1508.9	1526.0	1746.0	2277.5	2596.7	2484.6	2456.4	2314.3	2239.8	2156.8	2260.4
72.5°	1152.9	1182.0	1471.3	1996.8	2568.5	2797.0	2789.3	2602.7	2313.4	1980.5	1710.0
75°	390.3	389.4	772.9	1341.2	2307.5	2892.9	2908.3	2566.8	2018.2	1366.0	849.0
77.5°	83.9	84.7	159.2	543.5	1532.9	2322.9	2381.9	1936.0	1301.8	608.5	194.3
80°	41.1	41.9	65.9	143.8	612.8	1302.6	1395.1	995.4	481.0	121.5	32.5
82.5°	20.5	21.4	34.2	76.2	226.8	463.0	494.7	366.3	137.8	68.5	16.3
85°	7.7	7.7	17.1	45.4	103.6	108.7	133.5	106.1	83.0	55.6	4.3
87.5°	1.7	1.7	9.4	22.3	46.2	34.2	34.2	32.5	50.5	37.7	1.7
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°	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9
2.5°	386.0	382.6	376.6	370.6	366.3	361.2	358.6	356.0	355.2	354.3	356.0
5°	381.7	376.6	365.5	356.0	347.5	340.6	335.5	330.4	327.8	326.1	326.9
7.5°	381.7	374.0	357.8	343.2	329.5	315.0	300.4	289.3	280.7	275.6	276.4
10°	386.0	375.7	354.3	334.6	309.0	278.2	246.5	222.5	206.3	196.9	196.9
12.5°	395.4	381.7	355.2	324.4	280.7	226.8	178.9	149.8	137.8	130.9	131.8
15°	408.3	392.0	359.5	310.7	241.4	168.6	125.0	106.1	106.1	107.8	108.7
17.5°	422.8	404.8	362.9	290.1	190.9	120.7	98.4	96.7	99.3	103.6	103.6
20°	437.4	417.7	364.6	257.6	142.9	95.9	93.3	93.3	95.0	99.3	100.1
22.5°	455.3	433.9	362.9	217.4	107.0	90.7	89.9	89.9	89.9	95.0	95.0
25°	474.2	452.8	356.0	174.6	90.7	87.3	86.4	85.6	85.6	89.9	90.7
27.5°	495.6	472.4	339.8	133.5	85.6	83.9	83.0	81.3	81.3	84.7	84.7
30°	517.0	494.7	315.0	101.0	81.3	80.5	78.7	77.0	75.3	78.7	78.7
32.5°	540.1	517.8	282.4	80.5	75.3	75.3	74.5	71.9	70.2	71.9	72.7
35°	570.9	544.3	245.6	70.2	67.6	67.6	67.6	66.8	63.3	65.0	65.0
37.5°	612.0	581.1	202.8	65.0	61.6	59.9	59.9	59.9	57.3	58.2	58.2
40°	664.2	623.9	161.8	60.8	57.3	53.1	51.4	52.2	50.5	50.5	49.6
42.5°	735.2	670.2	121.5	57.3	53.9	47.9	44.5	43.6	41.9	41.1	41.1
45°	837.1	726.6	87.3	53.9	51.4	41.9	38.5	35.9	31.7	29.1	29.1
47.5°	968.9	790.8	65.0	50.5	48.8	36.8	32.5	27.4	21.4	19.7	19.7
50°	1129.8	862.7	54.8	45.4	44.5	32.5	25.7	18.0	12.0	10.3	11.1
52.5°	1286.4	930.3	48.8	40.2	39.4	28.2	18.8	9.4	5.1	5.1	5.1
55°	1418.2	978.3	44.5	35.9	34.2	22.3	10.3	4.3	2.6	2.6	2.6
57.5°	1537.2	1005.7	40.2	31.7	27.4	15.4	4.3	1.7	1.7	0.9	0.9
60°	1645.9	1021.9	35.1	27.4	21.4	8.6	1.7	0.9	0.9	0.0	0.0
62.5°	1752.8	1033.9	30.0	22.3	16.3	3.4	0.9	0.9	0.0	0.0	0.0
65°	1834.2	1029.6	24.0	18.0	10.3	1.7	0.9	0.0	0.0	0.0	0.0
67.5°	1831.6	971.4	18.0	13.7	5.1	0.9	0.0	0.0	0.0	0.0	0.0
70°	1638.2	818.2	12.0	8.6	1.7	0.9	0.0	0.0	0.0	0.0	0.0
72.5°	1162.3	524.7	7.7	5.1	0.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	511.8	159.2	4.3	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	100.1	36.8	2.6	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	24.0	4.3	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	10.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	0.9	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)