

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: P799752

Luminaire Tested: **ARCH2-50-727-U-T4W-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799752
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-50-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 410mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5144 lumens
Efficiency: N/A
Efficacy: 95.3 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 54
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: 24 FT



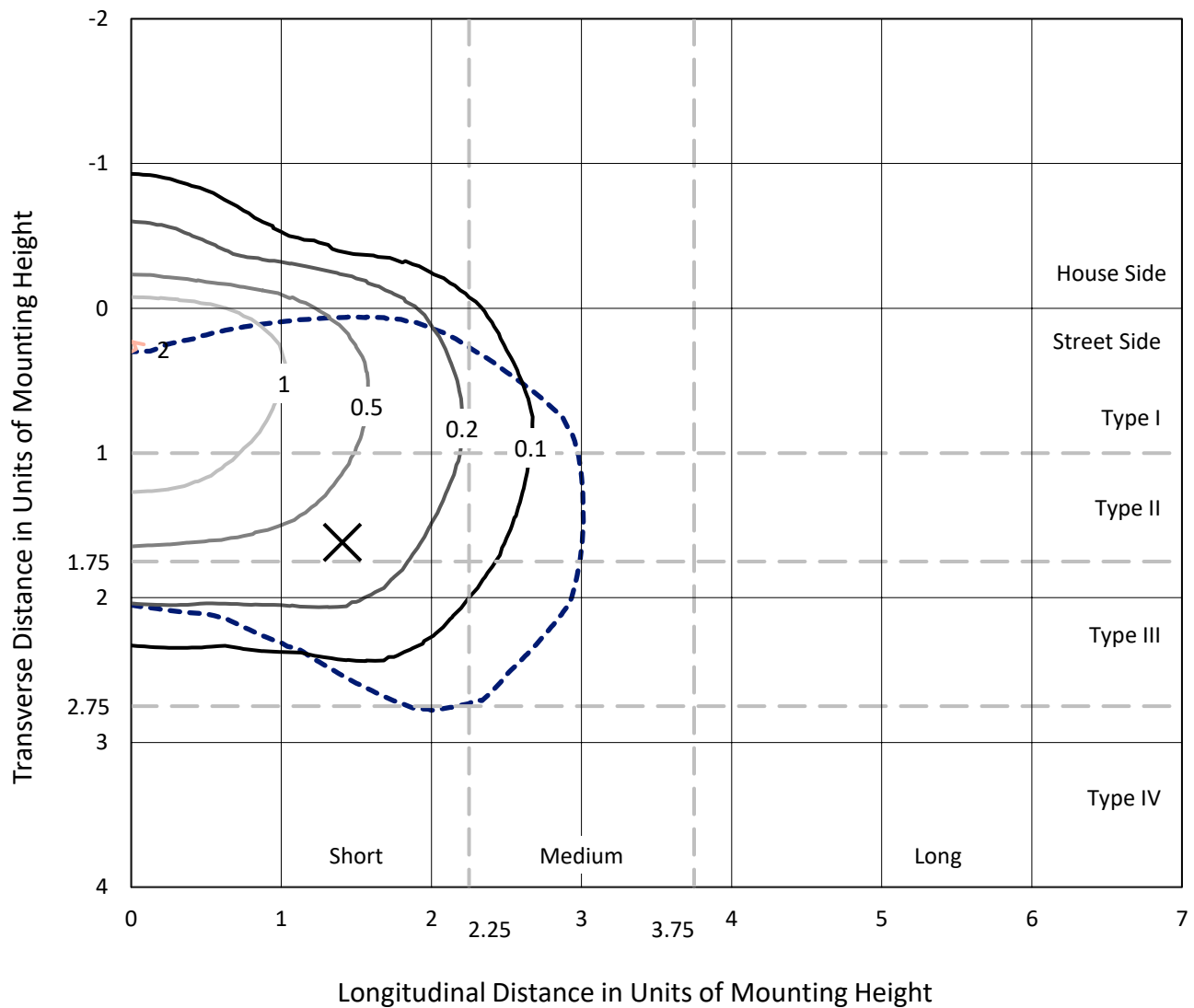
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

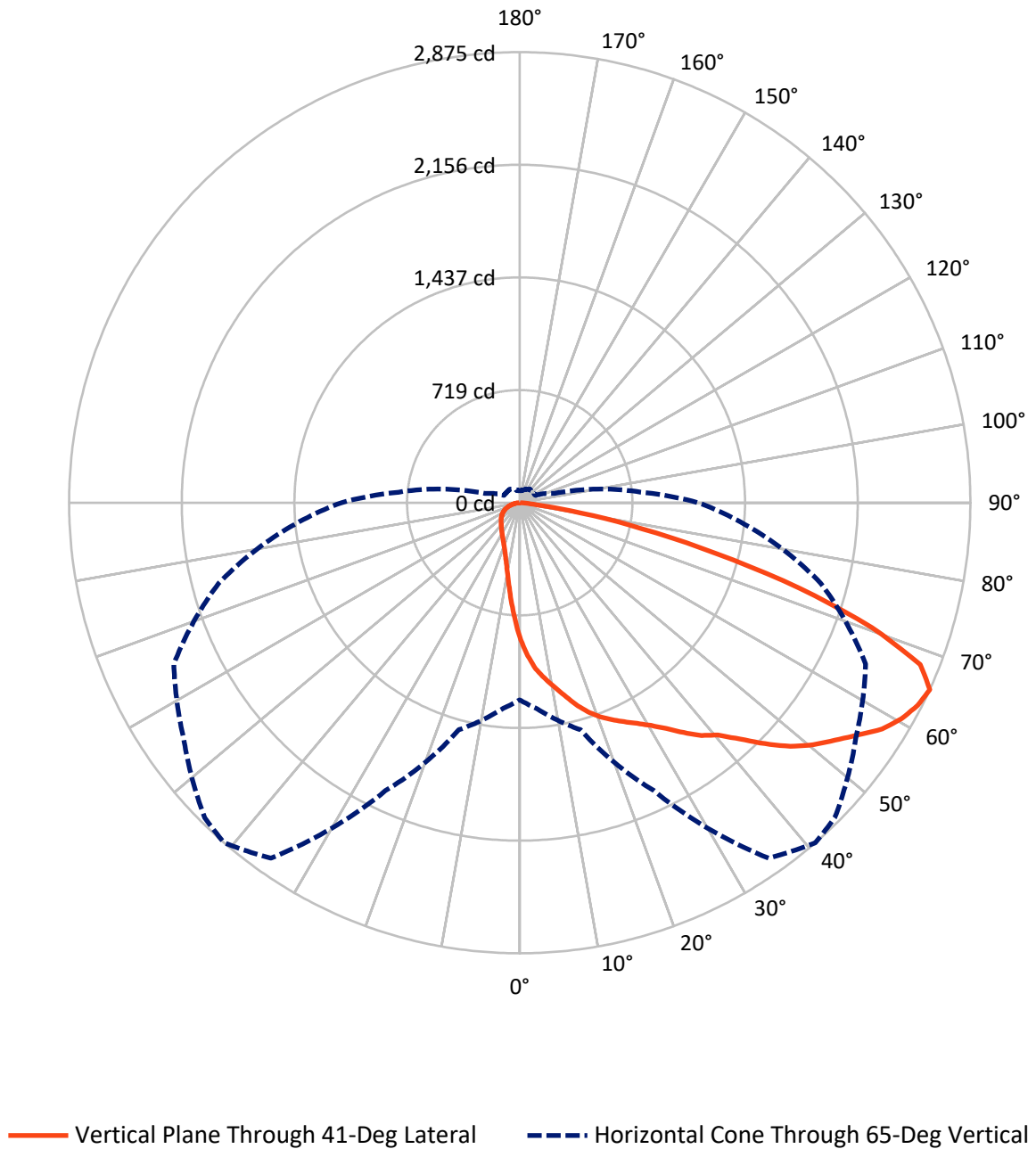


Based on 25 foot mounting height. Maximum calculated value = 2 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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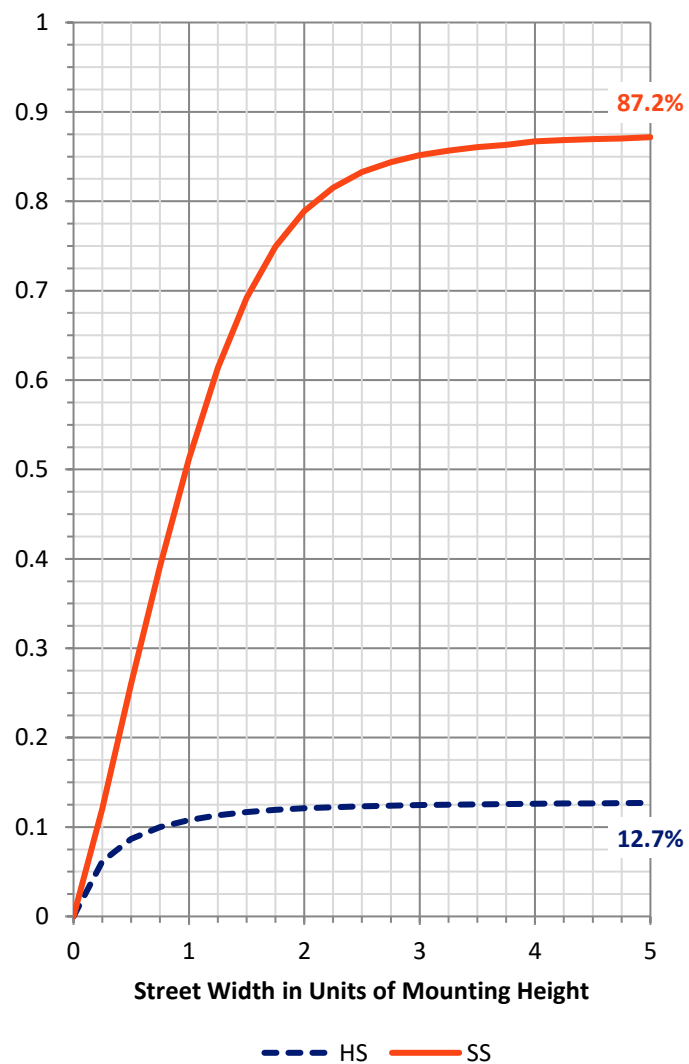
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	660.4	0.0	660.4
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	4483.6	0.0	4483.6
	% Fixture	87.2	0.0	87.2
Total	Lumens	5144.0	0.0	5144.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	1.6
10°-20°	244.9	4.8
20°-30°	421.3	8.2
30°-40°	639.0	12.4
40°-50°	936.1	18.2
50°-60°	1182.1	23.0
60°-70°	1108.4	21.5
70°-80°	494.0	9.6
80°-90°	36.6	0.7
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°	5144.0	100.0
0°-180°	5144.0	100.0

Coefficient of Utilization



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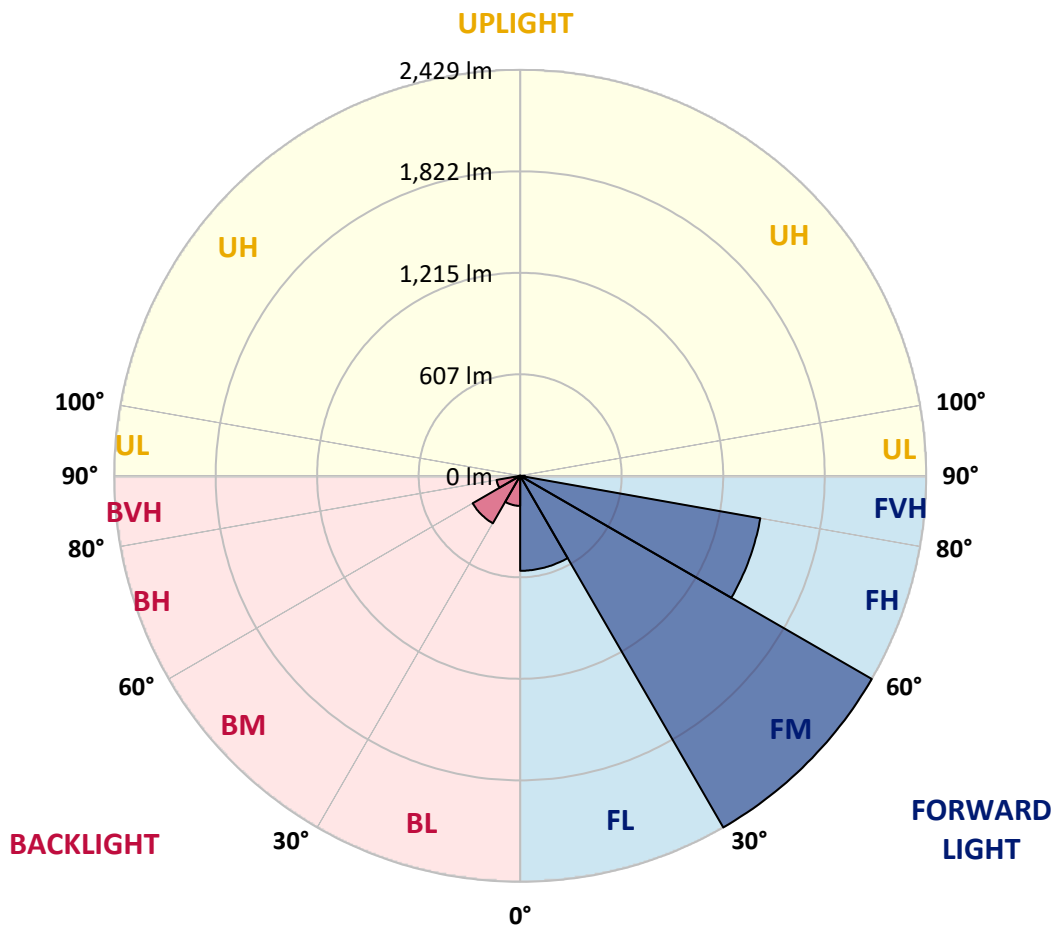
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	568.1	11.0			
FM	(30°-60°)	2429.2	47.2			
FH	(60°-80°)	1459.0	28.4			G1/1800
FVH	(80°-90°)	27.3	0.5			G1/100
BL	(0°-30°)	179.8	3.5	B1/500		
BM	(30°-60°)	327.9	6.4	B1/1000		
BH	(60°-80°)	143.5	2.8	B1/500		G1/500
BVH	(80°-90°)	9.3	0.2			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	876.5	876.5	876.5	876.5	876.5	876.5	876.5	876.5	876.5	876.5	876.5
2.5°	1011.0	1007.8	1005.6	993.7	993.7	977.4	978.5	963.3	944.9	915.6	884.1
5°	1106.5	1102.1	1096.7	1084.8	1080.5	1064.2	1062.0	1040.3	1008.9	957.9	901.5
7.5°	1190.0	1185.7	1178.1	1160.7	1148.8	1129.3	1123.8	1095.6	1060.9	998.0	918.8
10°	1266.0	1262.7	1252.9	1231.2	1215.0	1191.1	1181.3	1143.4	1100.0	1030.6	932.9
12.5°	1343.0	1338.6	1325.6	1307.2	1287.6	1259.4	1247.5	1198.7	1143.4	1066.3	953.5
15°	1414.6	1408.1	1398.3	1378.8	1361.4	1334.3	1321.3	1263.8	1196.5	1106.5	980.7
17.5°	1461.2	1455.8	1447.1	1436.3	1422.2	1401.5	1388.5	1332.1	1249.7	1145.5	1008.9
20°	1489.4	1487.2	1484.0	1477.5	1471.0	1456.9	1447.1	1394.0	1307.2	1183.5	1036.0
22.5°	1511.1	1508.9	1507.9	1507.9	1508.9	1503.5	1497.0	1451.4	1362.5	1223.6	1060.9
25°	1544.7	1543.7	1541.5	1539.3	1546.9	1548.0	1545.8	1514.4	1431.9	1276.8	1092.4
27.5°	1591.4	1588.1	1583.8	1581.6	1589.2	1594.6	1599.0	1577.3	1505.7	1331.0	1128.2
30°	1663.0	1653.2	1642.4	1634.8	1640.2	1648.9	1658.6	1645.6	1581.6	1398.3	1165.1
32.5°	1747.6	1735.7	1710.7	1696.6	1710.7	1717.2	1724.8	1718.3	1660.8	1471.0	1201.9
35°	1850.7	1836.6	1810.5	1789.9	1814.9	1800.8	1797.5	1791.0	1735.7	1542.6	1243.2
37.5°	2022.0	2001.4	1960.2	1914.7	1914.7	1884.3	1872.3	1852.8	1802.9	1606.6	1283.3
40°	2220.6	2193.4	2140.3	2073.0	2011.2	1948.3	1940.7	1926.6	1882.1	1680.3	1328.9
42.5°	2438.6	2386.5	2312.8	2231.4	2131.6	2060.0	2042.7	2002.5	1959.1	1755.2	1374.4
45°	2680.5	2572.0	2464.6	2423.4	2258.5	2193.4	2160.9	2088.2	2039.4	1833.3	1422.2
47.5°	2719.6	2635.0	2563.4	2556.9	2376.8	2322.5	2285.7	2181.5	2126.2	1916.8	1472.1
50°	2697.9	2646.9	2654.5	2628.4	2463.6	2427.8	2399.6	2281.3	2211.9	1997.1	1517.6
52.5°	2606.8	2635.0	2678.3	2630.6	2546.0	2516.7	2502.6	2388.7	2292.2	2070.9	1558.8
55°	2498.3	2517.8	2611.1	2669.7	2641.5	2615.4	2602.4	2513.5	2371.4	2132.7	1596.8
57.5°	2339.9	2331.2	2434.3	2663.2	2741.3	2726.1	2712.0	2636.0	2445.1	2177.2	1620.7
60°	2102.3	2083.9	2214.1	2533.0	2773.8	2797.7	2791.2	2717.4	2501.5	2176.1	1610.9
62.5°	1691.2	1736.7	1916.8	2320.4	2787.9	2848.7	2836.7	2723.9	2520.0	2113.2	1549.1
65°	1257.3	1322.4	1499.2	2027.5	2768.4	2874.7	2842.2	2617.6	2434.3	1988.4	1413.5
67.5°	905.8	963.3	1092.4	1668.4	2580.7	2755.4	2717.4	2444.0	2236.8	1811.6	1225.8
70°	619.4	660.6	748.5	1215.0	2203.2	2382.2	2358.3	2184.8	1925.5	1601.2	995.8
72.5°	437.2	454.5	510.9	801.7	1673.8	1869.1	1840.9	1797.5	1546.9	1331.0	774.5
75°	327.6	338.5	368.8	518.5	1129.3	1295.2	1269.2	1294.2	1155.3	1007.8	564.1
77.5°	123.7	134.5	209.4	330.9	668.2	795.2	769.1	784.3	642.2	508.8	281.0
80°	33.6	35.8	69.4	157.3	303.7	395.9	360.2	309.2	238.7	234.3	148.6
82.5°	14.1	16.3	31.5	84.6	108.5	108.5	91.1	112.8	91.1	109.6	71.6
85°	5.4	6.5	7.6	21.7	14.1	15.2	16.3	21.7	18.4	22.8	16.3
87.5°	0.0	0.0	0.0	1.1	1.1	2.2	1.1	2.2	3.3	3.3	3.3
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°	876.5	876.5	876.5	876.5	876.5	876.5	876.5	876.5	876.5	876.5	876.5
2.5°	871.1	859.2	841.8	813.6	784.3	768.0	747.4	744.2	722.5	720.3	711.6
5°	876.5	851.6	807.1	752.8	699.7	658.5	628.1	611.8	580.4	580.4	571.7
7.5°	880.8	841.8	770.2	689.9	617.2	561.9	520.7	503.3	475.1	473.0	466.5
10°	881.9	829.9	730.1	625.9	537.0	480.6	440.4	420.9	395.9	393.8	389.4
12.5°	890.6	823.4	694.3	570.6	479.5	418.7	379.7	363.4	343.9	341.7	337.4
15°	904.7	823.4	663.9	524.0	428.5	372.1	338.5	323.3	309.2	307.0	304.8
17.5°	918.8	821.2	633.5	480.6	386.2	335.2	305.9	294.0	283.1	282.0	279.9
20°	931.8	820.1	603.1	443.7	353.6	304.8	282.0	271.2	262.5	262.5	261.4
22.5°	944.9	817.9	573.9	409.0	325.4	282.0	262.5	250.6	244.1	244.1	243.0
25°	964.4	817.9	546.7	379.7	302.7	264.7	245.2	236.5	231.1	230.0	230.0
27.5°	987.2	824.4	522.9	353.6	283.1	247.3	232.1	223.5	217.0	214.8	215.9
30°	1012.1	829.9	501.2	330.9	264.7	234.3	218.0	209.4	202.9	200.7	201.8
32.5°	1037.1	836.4	481.6	310.3	246.2	222.4	206.1	196.3	189.8	188.8	188.8
35°	1064.2	842.9	462.1	292.9	231.1	210.4	195.3	184.4	180.1	177.9	179.0
37.5°	1091.3	853.7	443.7	276.6	220.2	199.6	185.5	174.7	171.4	170.3	170.3
40°	1123.8	870.0	436.1	265.8	210.4	189.8	177.9	167.1	163.8	163.8	163.8
42.5°	1151.0	883.0	429.6	253.8	202.9	181.2	170.3	161.6	159.5	158.4	159.5
45°	1178.1	895.0	420.9	243.0	193.1	172.5	163.8	155.1	153.0	153.0	153.0
47.5°	1205.2	901.5	409.0	232.1	184.4	164.9	157.3	149.7	147.5	147.5	147.5
50°	1226.9	906.9	391.6	220.2	174.7	158.4	150.8	143.2	141.0	141.0	141.0
52.5°	1248.6	908.0	373.2	206.1	164.9	150.8	144.3	136.7	134.5	133.4	133.4
55°	1268.1	906.9	351.5	189.8	154.0	142.1	136.7	130.2	125.8	121.5	123.7
57.5°	1282.2	905.8	326.5	173.6	143.2	133.4	131.3	122.6	113.9	103.1	105.2
60°	1276.8	893.9	299.4	153.0	131.3	124.8	124.8	112.8	97.6	92.2	93.3
62.5°	1242.1	860.2	271.2	131.3	119.3	116.1	115.0	102.0	90.0	84.6	85.7
65°	1137.9	775.6	230.0	111.7	107.4	106.3	106.3	94.4	83.5	77.0	78.1
67.5°	979.6	650.9	187.7	94.4	95.5	97.6	97.6	86.8	75.9	69.4	70.5
70°	785.4	508.8	149.7	81.4	82.4	85.7	87.9	78.1	68.3	61.8	61.8
72.5°	591.2	386.2	120.4	68.3	73.8	73.8	77.0	69.4	59.7	53.2	54.2
75°	428.5	276.6	95.5	57.5	64.0	62.9	62.9	58.6	51.0	46.6	46.6
77.5°	202.9	145.4	75.9	41.2	49.9	48.8	49.9	46.6	43.4	39.1	40.1
80°	99.8	71.6	48.8	29.3	34.7	35.8	39.1	36.9	35.8	32.5	32.5
82.5°	47.7	28.2	22.8	20.6	23.9	25.0	27.1	27.1	28.2	26.0	26.0
85°	13.0	7.6	9.8	13.0	15.2	16.3	18.4	19.5	19.5	18.4	19.5
87.5°	3.3	3.3	4.3	6.5	7.6	8.7	9.8	9.8	4.3	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)