

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: P799800

Luminaire Tested: **ARCH2-50-740-U-T4W-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799800
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: ARCH2-50-740-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 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: 5597 lumens
Efficiency: N/A
Efficacy: 103.6 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

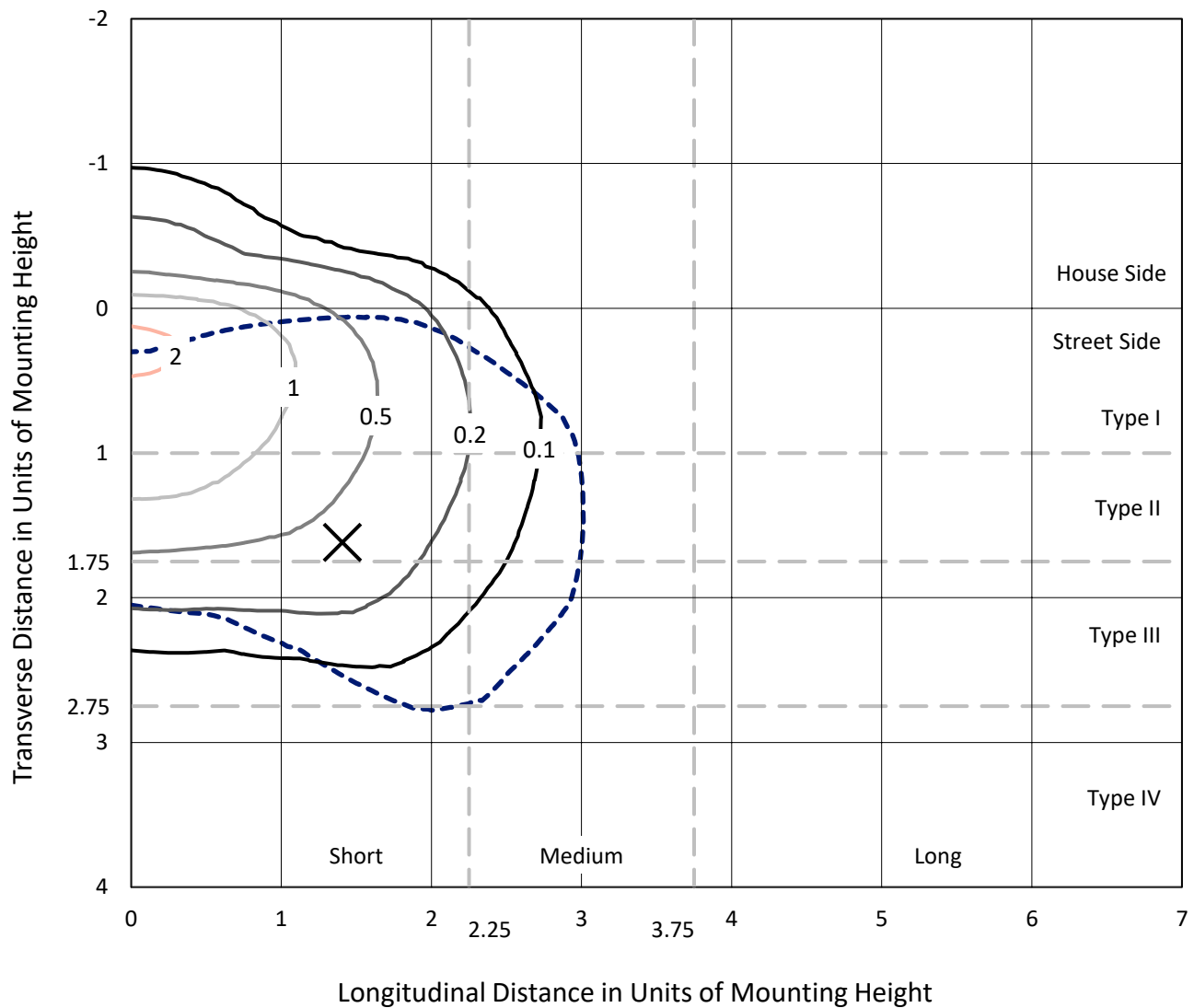


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Iso-Footcandle Lines of Horizontal Illumination

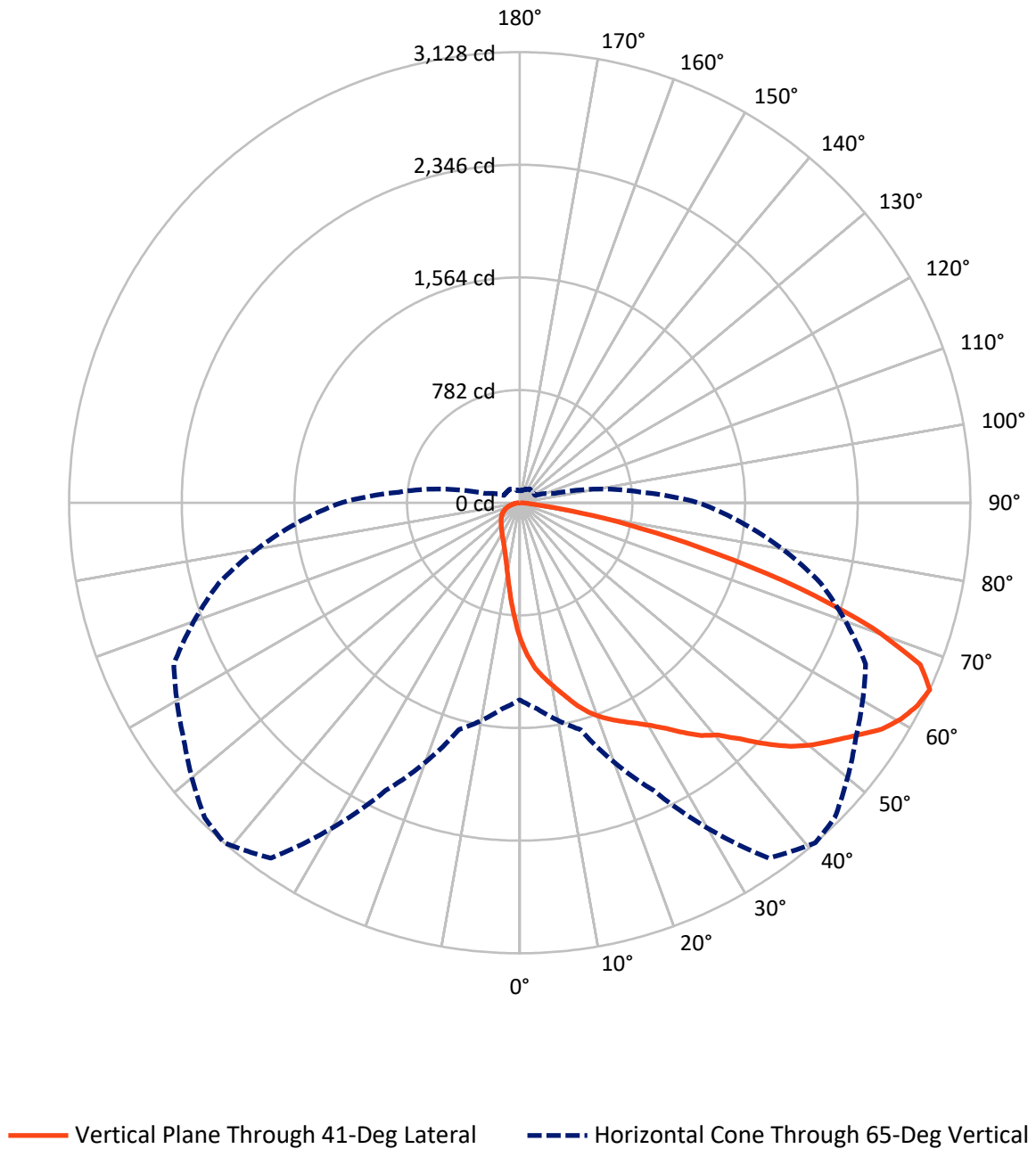
✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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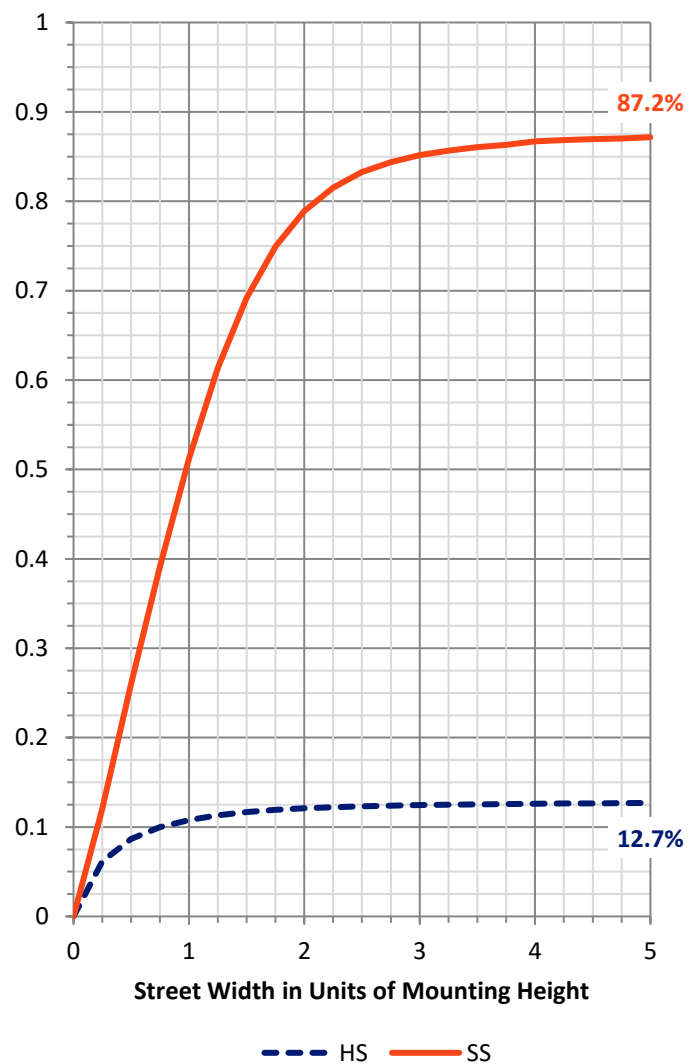
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	718.6	0.0	718.6
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	4878.4	0.0	4878.4
	% Fixture	87.2	0.0	87.2
Total	Lumens	5597.0	0.0	5597.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.9	1.6
10°-20°	266.5	4.8
20°-30°	458.4	8.2
30°-40°	695.2	12.4
40°-50°	1018.5	18.2
50°-60°	1286.2	23.0
60°-70°	1206.0	21.5
70°-80°	537.5	9.6
80°-90°	39.8	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°	5597.0	100.0
0°-180°	5597.0	100.0

Coefficient of Utilization



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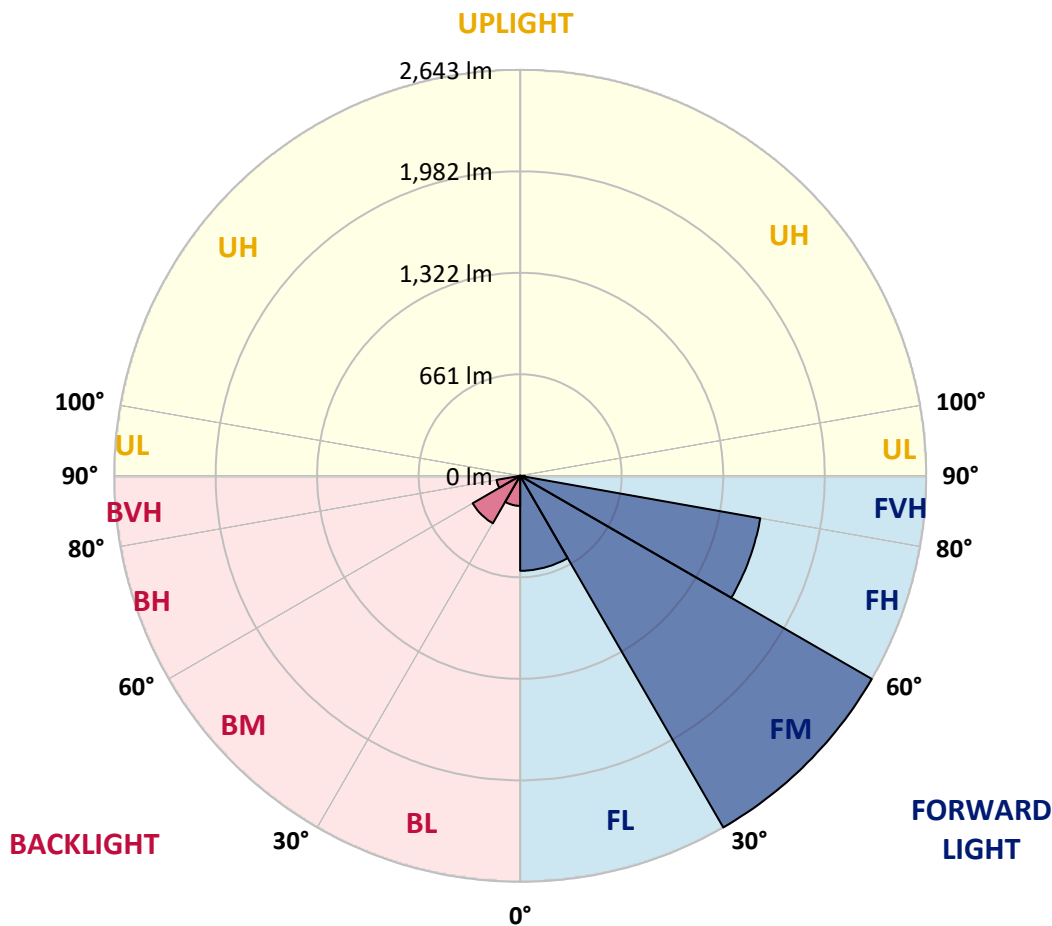
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	618.1	11.0			
FM	(30°-60°)	2643.1	47.2			
FH	(60°-80°)	1587.5	28.4			G1/1800
FVH	(80°-90°)	29.7	0.5			G1/100
BL	(0°-30°)	195.6	3.5	B1/500		
BM	(30°-60°)	356.8	6.4	B1/1000		
BH	(60°-80°)	156.1	2.8	B1/500		G1/500
BVH	(80°-90°)	10.1	0.2			G1/100
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°	953.7	953.7	953.7	953.7	953.7	953.7	953.7	953.7	953.7	953.7	953.7
2.5°	1100.1	1096.5	1094.2	1081.2	1081.2	1063.5	1064.6	1048.1	1028.1	996.2	962.0
5°	1203.9	1199.2	1193.3	1180.3	1175.6	1157.9	1155.5	1131.9	1097.7	1042.2	980.8
7.5°	1294.8	1290.1	1281.8	1262.9	1250.0	1228.7	1222.8	1192.1	1154.4	1085.9	999.7
10°	1377.4	1373.9	1363.3	1339.7	1322.0	1296.0	1285.4	1244.1	1196.8	1121.3	1015.1
12.5°	1461.2	1456.5	1442.4	1422.3	1401.0	1370.4	1357.4	1304.3	1244.1	1160.3	1037.5
15°	1539.1	1532.1	1521.4	1500.2	1481.3	1451.8	1437.6	1375.1	1301.9	1203.9	1067.0
17.5°	1589.9	1584.0	1574.5	1562.7	1547.4	1525.0	1510.8	1449.4	1359.7	1246.4	1097.7
20°	1620.6	1618.2	1614.7	1607.6	1600.5	1585.2	1574.5	1516.7	1422.3	1287.7	1127.2
22.5°	1644.2	1641.8	1640.6	1640.6	1641.8	1635.9	1628.8	1579.3	1482.5	1331.4	1154.4
25°	1680.8	1679.6	1677.2	1674.9	1683.1	1684.3	1682.0	1647.7	1558.0	1389.2	1188.6
27.5°	1731.5	1728.0	1723.3	1720.9	1729.2	1735.1	1739.8	1716.2	1638.3	1448.3	1227.5
30°	1809.4	1798.8	1787.0	1778.7	1784.6	1794.1	1804.7	1790.5	1720.9	1521.4	1267.7
32.5°	1901.5	1888.5	1861.4	1846.0	1861.4	1868.4	1876.7	1869.6	1807.1	1600.5	1307.8
35°	2013.6	1998.3	1970.0	1947.5	1974.7	1959.3	1955.8	1948.7	1888.5	1678.4	1352.6
37.5°	2200.1	2177.7	2132.8	2083.3	2083.3	2050.2	2037.2	2016.0	1961.7	1748.1	1396.3
40°	2416.1	2386.6	2328.8	2255.6	2188.3	2119.9	2111.6	2096.3	2047.9	1828.3	1445.9
42.5°	2653.4	2596.7	2516.4	2427.9	2319.3	2241.4	2222.5	2178.9	2131.7	1909.8	1495.5
45°	2916.6	2798.5	2681.7	2636.8	2457.4	2386.6	2351.2	2272.1	2219.0	1994.7	1547.4
47.5°	2959.1	2867.0	2789.1	2782.0	2586.1	2527.1	2486.9	2373.6	2313.4	2085.6	1601.7
50°	2935.5	2880.0	2888.2	2859.9	2680.5	2641.6	2610.9	2482.2	2406.7	2173.0	1651.3
52.5°	2836.3	2867.0	2914.2	2862.3	2770.2	2738.3	2723.0	2599.1	2494.0	2253.2	1696.1
55°	2718.3	2739.5	2841.0	2904.8	2874.1	2845.8	2831.6	2734.8	2580.2	2320.5	1737.4
57.5°	2546.0	2536.5	2648.6	2897.7	2982.7	2966.1	2950.8	2868.2	2660.4	2368.9	1763.4
60°	2287.5	2267.4	2409.0	2756.1	3018.1	3044.0	3037.0	2956.7	2721.8	2367.7	1752.8
62.5°	1840.1	1889.7	2085.6	2524.7	3033.4	3099.5	3086.5	2963.8	2741.9	2299.3	1685.5
65°	1368.0	1438.8	1631.2	2206.0	3012.2	3127.9	3092.4	2848.1	2648.6	2163.5	1538.0
67.5°	985.6	1048.1	1188.6	1815.3	2808.0	2998.0	2956.7	2659.3	2433.8	1971.1	1333.8
70°	674.0	718.8	814.4	1322.0	2397.2	2592.0	2566.0	2377.2	2095.1	1742.2	1083.5
72.5°	475.7	494.6	555.9	872.3	1821.2	2033.7	2003.0	1955.8	1683.1	1448.3	842.7
75°	356.5	368.3	401.3	564.2	1228.7	1409.3	1381.0	1408.1	1257.0	1096.5	613.8
77.5°	134.6	146.4	227.8	360.0	727.1	865.2	836.8	853.4	698.8	553.6	305.7
80°	36.6	39.0	75.5	171.1	330.5	430.8	391.9	336.4	259.7	254.9	161.7
82.5°	15.3	17.7	34.2	92.1	118.0	118.0	99.1	122.8	99.1	119.2	77.9
85°	5.9	7.1	8.3	23.6	15.3	16.5	17.7	23.6	20.1	24.8	17.7
87.5°	0.0	0.0	0.0	1.2	1.2	2.4	1.2	2.4	3.5	3.5	3.5
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°	953.7	953.7	953.7	953.7	953.7	953.7	953.7	953.7	953.7	953.7	953.7
2.5°	947.8	934.8	915.9	885.2	853.4	835.7	813.2	809.7	786.1	783.7	774.3
5°	953.7	926.6	878.2	819.1	761.3	716.5	683.4	665.7	631.5	631.5	622.0
7.5°	958.4	915.9	838.0	750.7	671.6	611.4	566.6	547.7	517.0	514.6	507.5
10°	959.6	902.9	794.4	681.0	584.3	522.9	479.2	458.0	430.8	428.5	423.7
12.5°	969.0	895.9	755.4	620.8	521.7	455.6	413.1	395.4	374.2	371.8	367.1
15°	984.4	895.9	722.4	570.1	466.2	404.9	368.3	351.7	336.4	334.0	331.7
17.5°	999.7	893.5	689.3	522.9	420.2	364.7	332.9	319.9	308.1	306.9	304.5
20°	1013.9	892.3	656.3	482.8	384.8	331.7	306.9	295.1	285.6	285.6	284.5
22.5°	1028.1	890.0	624.4	445.0	354.1	306.9	285.6	272.7	265.6	265.6	264.4
25°	1049.3	890.0	594.9	413.1	329.3	288.0	266.8	257.3	251.4	250.2	250.2
27.5°	1074.1	897.0	568.9	384.8	308.1	269.1	252.6	243.1	236.1	233.7	234.9
30°	1101.2	902.9	545.3	360.0	288.0	254.9	237.2	227.8	220.7	218.4	219.5
32.5°	1128.4	910.0	524.1	337.6	267.9	242.0	224.3	213.6	206.6	205.4	205.4
35°	1157.9	917.1	502.8	318.7	251.4	229.0	212.5	200.7	195.9	193.6	194.8
37.5°	1187.4	928.9	482.8	301.0	239.6	217.2	201.8	190.0	186.5	185.3	185.3
40°	1222.8	946.6	474.5	289.2	229.0	206.6	193.6	181.8	178.2	178.2	178.2
42.5°	1252.3	960.8	467.4	276.2	220.7	197.1	185.3	175.9	173.5	172.3	173.5
45°	1281.8	973.8	458.0	264.4	210.1	187.7	178.2	168.8	166.4	166.4	166.4
47.5°	1311.3	980.8	445.0	252.6	200.7	179.4	171.1	162.9	160.5	160.5	160.5
50°	1334.9	986.7	426.1	239.6	190.0	172.3	164.1	155.8	153.4	153.4	153.4
52.5°	1358.5	987.9	406.0	224.3	179.4	164.1	157.0	148.7	146.4	145.2	145.2
55°	1379.8	986.7	382.4	206.6	167.6	154.6	148.7	141.6	136.9	132.2	134.6
57.5°	1395.1	985.6	355.3	188.9	155.8	145.2	142.8	133.4	123.9	112.1	114.5
60°	1389.2	972.6	325.8	166.4	142.8	135.7	135.7	122.8	106.2	100.3	101.5
62.5°	1351.5	936.0	295.1	142.8	129.8	126.3	125.1	111.0	98.0	92.1	93.2
65°	1238.2	843.9	250.2	121.6	116.9	115.7	115.7	102.7	90.9	83.8	85.0
67.5°	1065.8	708.2	204.2	102.7	103.9	106.2	106.2	94.4	82.6	75.5	76.7
70°	854.6	553.6	162.9	88.5	89.7	93.2	95.6	85.0	74.4	67.3	67.3
72.5°	643.3	420.2	131.0	74.4	80.3	80.3	83.8	75.5	64.9	57.8	59.0
75°	466.2	301.0	103.9	62.6	69.6	68.5	68.5	63.7	55.5	50.8	50.8
77.5°	220.7	158.2	82.6	44.9	54.3	53.1	54.3	50.8	47.2	42.5	43.7
80°	108.6	77.9	53.1	31.9	37.8	39.0	42.5	40.1	39.0	35.4	35.4
82.5°	51.9	30.7	24.8	22.4	26.0	27.1	29.5	29.5	30.7	28.3	28.3
85°	14.2	8.3	10.6	14.2	16.5	17.7	20.1	21.2	21.2	20.1	21.2
87.5°	3.5	3.5	4.7	7.1	8.3	9.4	10.6	10.6	4.7	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)