

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: P798857

Luminaire Tested: **ARCH1-40-727-U-T4W**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P798857
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH1-40-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1220mA LIGHTSQUARE WITH 10 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5191 lumens
Efficiency: N/A
Efficacy: 120.7 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

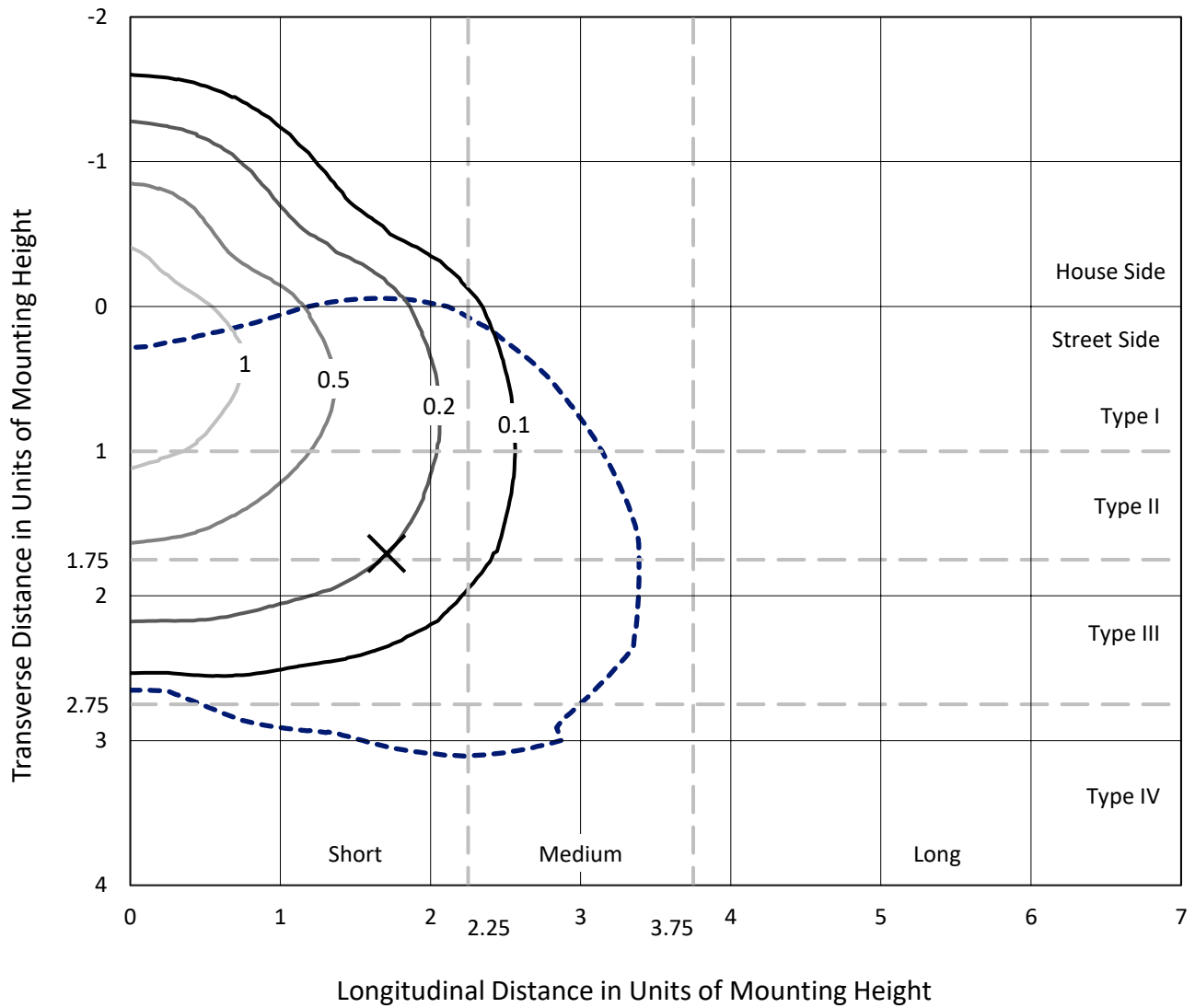
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P798857
 CATALOG NUMBER: ARCH1-40-727-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

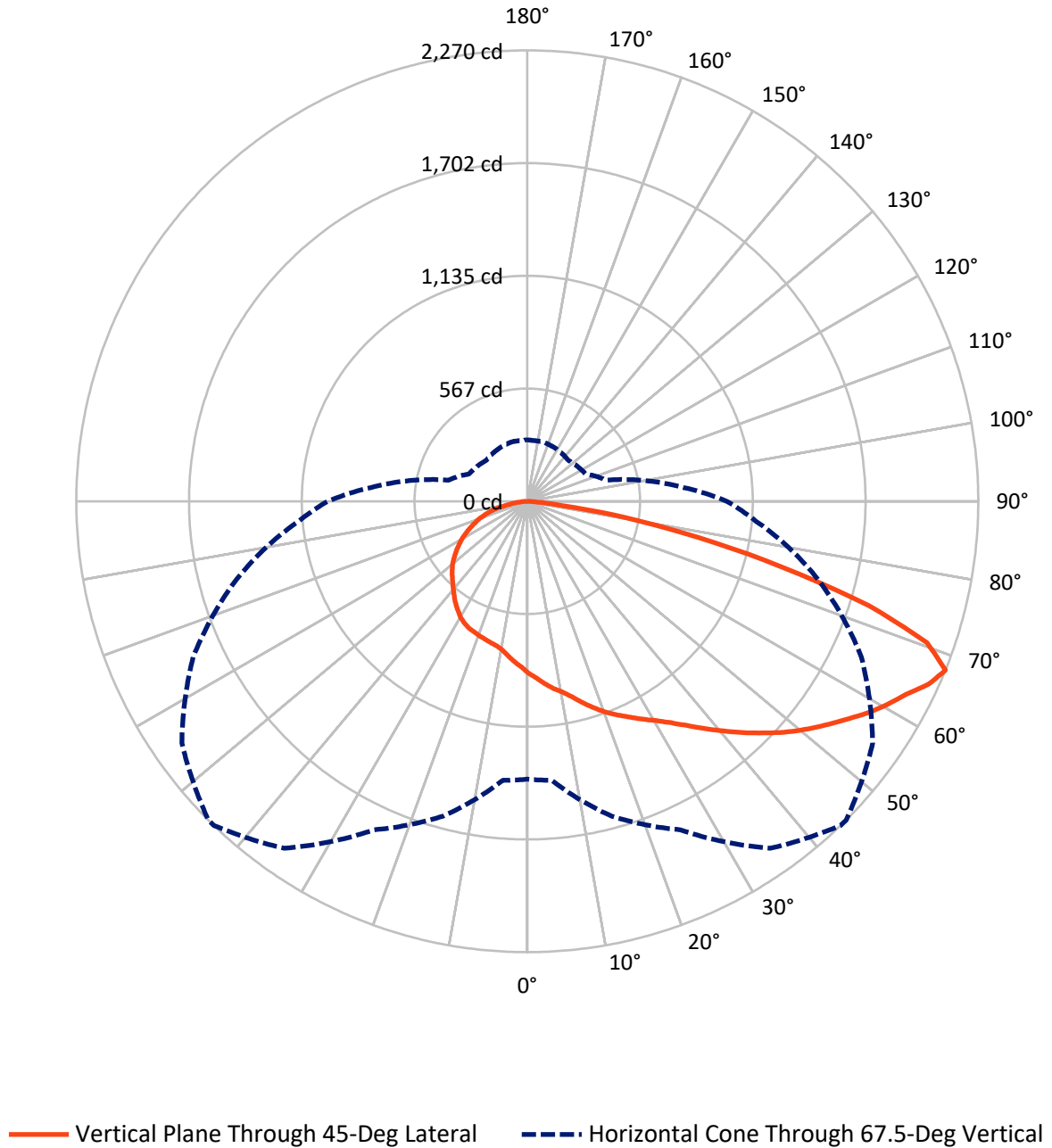
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
 Type IV - Short - N/A

REPORT NUMBER: P798857
CATALOG NUMBER: ARCH1-40-727-U-T4W

Luminous Intensity Polar Plot



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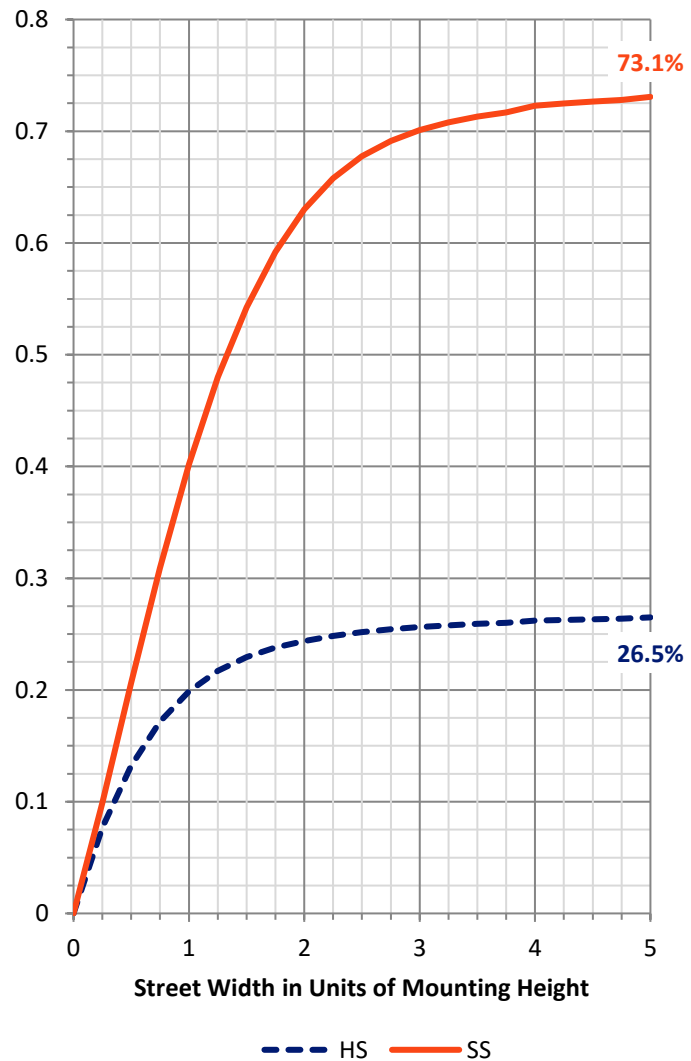
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1386.8	0.0	1386.8
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	3804.2	0.0	3804.2
	% Fixture	73.3	0.0	73.3
Total	Lumens	5191.0	0.0	5191.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	1.6
10°-20°	256.1	4.9
20°-30°	442.0	8.5
30°-40°	651.8	12.6
40°-50°	883.0	17.0
50°-60°	1079.3	20.8
60°-70°	1113.1	21.4
70°-80°	609.7	11.7
80°-90°	73.1	1.4
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°	5191.0	100.0
0°-180°	5191.0	100.0



REPORT NUMBER: P798857

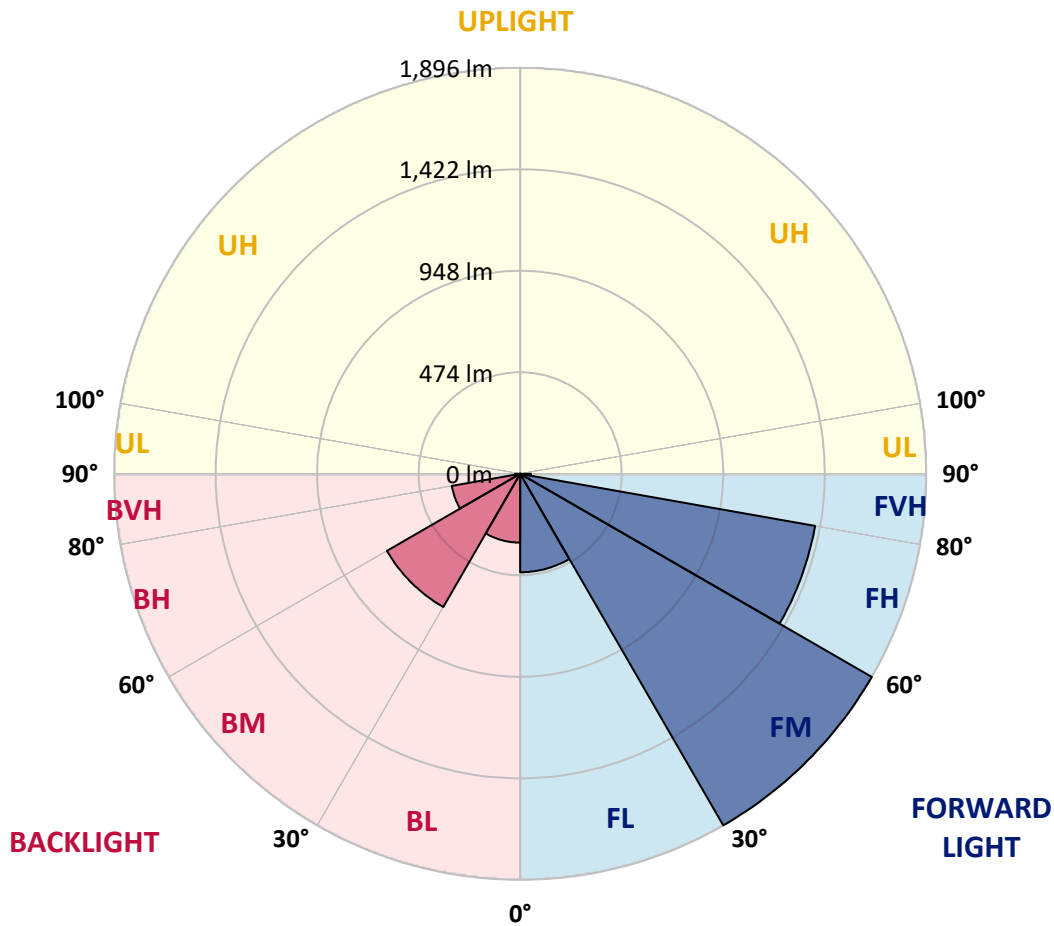
CATALOG NUMBER: ARCH1-40-727-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	459.5	8.9			
FM (30°-60°)	1895.8	36.5			
FH (60°-80°)	1398.5	26.9			G1/1800
FVH (80°-90°)	50.3	1.0			G1/100
BL (0°-30°)	321.4	6.2	B1/500		
BM (30°-60°)	718.3	13.8	B1/1000		
BH (60°-80°)	324.3	6.2	B1/500		G1/500
BVH (80°-90°)	22.7	0.4			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 IV Short



REPORT NUMBER: P798857

CATALOG NUMBER: ARCH1-40-727-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	865.8	865.8	865.8	865.8	865.8	865.8	865.8	865.8	865.8	865.8	865.8
2.5°	903.7	902.9	904.5	898.9	891.8	891.0	891.0	886.3	880.8	869.7	861.0
5°	946.3	944.8	945.5	937.6	928.2	923.4	922.6	912.4	899.7	882.3	866.6
7.5°	985.8	984.2	983.5	974.8	960.6	952.7	951.9	936.9	921.8	895.0	872.1
10°	1023.0	1021.4	1019.8	1007.9	990.6	978.7	977.1	958.2	939.2	906.0	876.8
12.5°	1070.4	1067.2	1065.6	1051.4	1026.1	1013.5	1011.1	985.8	962.1	921.8	886.3
15°	1120.1	1117.7	1115.4	1101.9	1073.5	1056.9	1053.0	1021.4	989.0	942.4	900.5
17.5°	1157.2	1154.9	1154.9	1143.0	1117.0	1098.0	1094.8	1056.9	1016.6	961.3	911.6
20°	1180.2	1177.8	1180.2	1173.0	1153.3	1137.5	1134.3	1092.5	1044.3	978.7	921.1
22.5°	1196.7	1194.4	1198.3	1195.2	1180.9	1171.5	1169.1	1128.0	1072.7	996.9	930.5
25°	1226.0	1226.0	1226.0	1220.4	1207.0	1203.8	1203.8	1168.3	1109.1	1020.6	944.8
27.5°	1284.4	1281.3	1277.3	1261.5	1238.6	1237.8	1242.6	1209.4	1150.9	1051.4	962.1
30°	1370.5	1368.9	1353.9	1320.8	1282.1	1278.1	1281.3	1253.6	1195.9	1083.8	981.9
32.5°	1481.9	1476.4	1445.6	1395.8	1340.5	1322.3	1328.7	1299.4	1243.3	1117.0	1000.8
35°	1560.9	1562.5	1540.4	1495.3	1429.8	1381.6	1386.3	1350.8	1294.7	1154.1	1024.5
37.5°	1651.7	1657.3	1624.1	1590.1	1529.3	1447.1	1451.9	1403.7	1346.0	1200.7	1049.8
40°	1777.3	1766.3	1710.2	1669.9	1602.8	1515.9	1519.8	1462.9	1405.3	1244.9	1079.0
42.5°	1882.4	1862.6	1794.7	1743.4	1662.8	1588.5	1592.5	1526.9	1465.3	1293.9	1111.4
45°	2033.3	1978.8	1880.8	1855.5	1724.4	1659.6	1663.6	1594.9	1528.5	1346.0	1146.2
47.5°	2121.0	2034.1	1971.7	1958.2	1792.3	1733.1	1737.8	1666.7	1596.4	1405.3	1182.5
50°	2115.4	2059.3	2041.2	2008.0	1852.4	1801.8	1806.6	1741.0	1665.2	1463.7	1217.3
52.5°	2079.1	2089.4	2079.9	2024.6	1912.4	1868.2	1873.7	1814.5	1735.5	1518.2	1249.7
55°	2135.2	2142.3	2124.1	2051.4	1978.8	1934.5	1940.9	1891.9	1805.0	1566.4	1277.3
57.5°	2202.3	2177.0	2158.9	2098.8	2047.5	2006.4	2013.5	1970.9	1865.0	1605.1	1298.6
60°	2199.2	2146.2	2164.4	2102.0	2094.1	2072.8	2079.1	2035.6	1910.8	1633.6	1307.3
62.5°	2037.2	2008.8	2100.4	2079.1	2132.0	2132.0	2139.9	2075.1	1938.5	1645.4	1302.6
65°	1756.0	1757.6	1918.7	2007.2	2177.0	2213.4	2219.7	2099.6	1922.7	1610.7	1258.4
67.5°	1399.0	1409.2	1640.7	1824.7	2132.0	2268.7	2269.5	2121.7	1854.7	1512.7	1155.7
70°	1023.7	1031.6	1305.0	1528.5	1919.5	2146.2	2133.6	2059.3	1707.0	1342.1	995.3
72.5°	692.0	699.1	980.3	1173.8	1575.1	1827.9	1800.2	1820.0	1455.0	1102.7	800.2
75°	465.3	474.0	697.5	839.7	1158.8	1387.9	1326.3	1378.4	1125.6	835.0	583.8
77.5°	293.1	298.6	443.1	550.6	791.5	944.8	883.1	883.9	648.5	449.5	313.6
80°	186.4	188.0	268.6	317.6	458.2	568.0	502.4	408.4	292.3	238.6	187.2
82.5°	108.2	105.9	160.4	179.3	218.0	215.7	178.5	169.0	128.0	119.3	95.6
85°	43.4	40.3	70.3	65.6	66.4	70.3	52.1	52.1	41.9	32.4	23.7
87.5°	8.7	8.7	9.5	8.7	8.7	9.5	7.1	7.1	6.3	6.3	6.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P798857

CATALOG NUMBER: ARCH1-40-727-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	865.8	865.8	865.8	865.8	865.8	865.8	865.8	865.8	865.8	865.8	865.8
2.5°	859.4	857.9	853.9	843.6	838.1	835.0	830.2	828.6	827.8	828.6	831.0
5°	861.8	856.3	845.2	828.6	817.6	810.5	802.6	799.4	797.0	797.0	799.4
7.5°	863.4	854.7	835.7	811.3	795.5	784.4	774.9	771.0	770.2	772.5	773.3
10°	864.2	851.5	824.7	793.9	773.3	759.1	749.6	747.3	749.6	754.4	755.2
12.5°	869.7	852.3	818.4	782.0	757.5	743.3	736.2	736.2	742.5	751.2	752.0
15°	879.2	857.9	815.2	772.5	747.3	734.6	732.3	736.2	745.7	759.1	760.7
17.5°	886.3	861.0	808.1	759.9	733.8	725.9	729.9	739.4	752.8	771.0	772.5
20°	891.0	861.0	797.8	744.9	720.4	718.8	729.9	744.9	759.1	780.4	782.8
22.5°	895.8	859.4	786.0	726.7	705.4	710.1	730.7	749.6	763.9	786.8	790.7
25°	904.5	861.8	774.1	708.6	689.6	703.0	729.9	752.8	767.8	791.5	797.8
27.5°	916.3	867.3	765.4	692.0	673.8	692.0	724.4	752.0	767.8	790.7	797.8
30°	929.0	873.7	755.2	673.8	655.6	676.2	712.5	743.3	761.5	782.8	791.5
32.5°	942.4	880.8	746.5	654.1	633.5	654.8	695.1	729.9	749.6	769.4	778.9
35°	960.6	893.4	741.7	638.3	613.8	632.7	673.0	712.5	733.8	752.0	763.1
37.5°	982.7	909.2	739.4	622.5	592.4	608.2	649.3	691.2	714.1	729.1	739.4
40°	1007.9	929.0	738.6	607.5	571.1	583.0	624.8	666.7	688.8	700.7	709.4
42.5°	1036.4	951.1	737.0	592.4	549.8	559.3	601.1	642.2	661.2	671.4	679.3
45°	1066.4	973.2	733.8	574.3	526.9	537.9	576.6	613.0	632.7	641.4	650.1
47.5°	1096.4	995.3	727.5	553.7	506.3	516.6	550.6	582.2	598.0	605.9	614.6
50°	1125.6	1015.1	712.5	530.0	485.0	494.5	520.6	541.9	553.7	560.1	568.7
52.5°	1151.7	1028.5	691.2	502.4	463.7	468.4	485.8	504.0	513.5	514.2	522.1
55°	1173.8	1035.6	660.4	474.0	440.8	441.6	451.0	465.3	469.2	466.1	471.6
57.5°	1186.5	1031.6	626.4	444.7	417.1	413.9	421.0	428.1	428.9	421.0	426.6
60°	1189.6	1013.5	582.2	415.5	393.4	384.7	387.1	385.5	383.9	380.7	385.5
62.5°	1173.8	974.8	533.2	387.1	368.1	354.7	353.9	353.1	355.5	356.3	357.0
65°	1116.2	902.1	474.7	357.8	341.2	323.1	322.3	331.8	334.9	330.2	331.8
67.5°	1004.8	790.7	410.8	323.9	307.3	291.5	297.8	303.3	308.9	307.3	308.9
70°	846.8	649.3	352.3	286.0	270.2	261.5	268.6	273.3	274.1	272.5	274.1
72.5°	665.9	507.1	297.8	247.2	233.0	229.1	237.8	241.7	248.8	252.0	252.8
75°	481.1	374.4	244.1	205.4	193.5	193.5	201.4	208.5	214.9	210.9	208.5
77.5°	268.6	223.5	175.4	141.4	143.8	154.8	158.0	165.9	172.2	171.4	169.8
80°	162.7	139.8	118.5	91.6	90.8	99.5	120.1	133.5	136.7	129.5	128.8
82.5°	84.5	73.5	63.2	51.3	56.9	66.4	69.5	83.7	92.4	89.3	93.2
85°	21.3	20.5	22.9	23.7	29.2	32.4	35.5	41.9	27.6	13.4	13.4
87.5°	6.3	6.3	7.9	7.9	10.3	12.6	11.8	11.8	6.3	0.8	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)