

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: P798921

Luminaire Tested: **ARCH1-40-750-U-T4W**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P798921
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: ARCH1-40-750-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1220mA LIGHTSQUARE WITH 10 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5648 lumens
Efficiency: N/A
Efficacy: 131.3 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

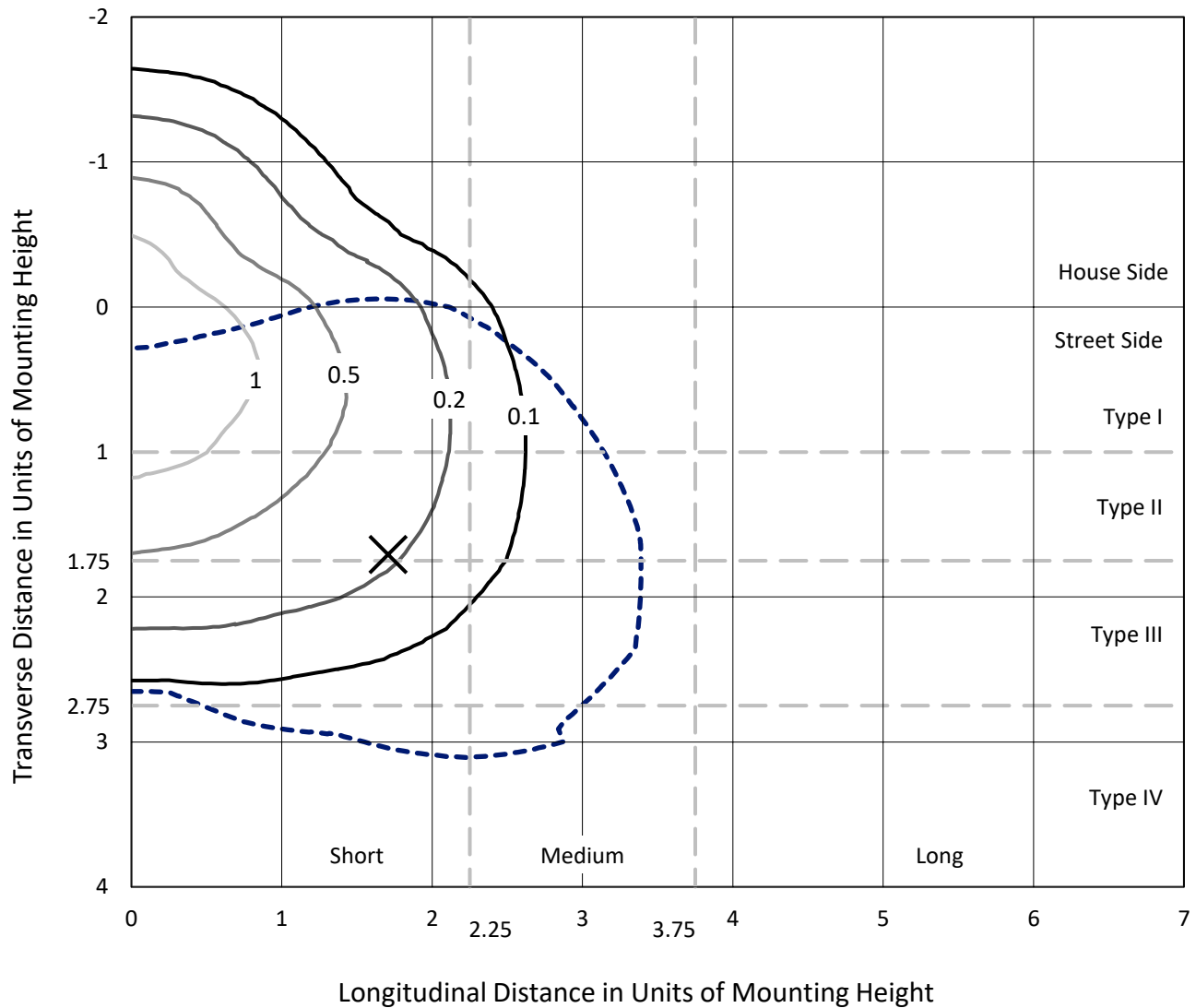


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

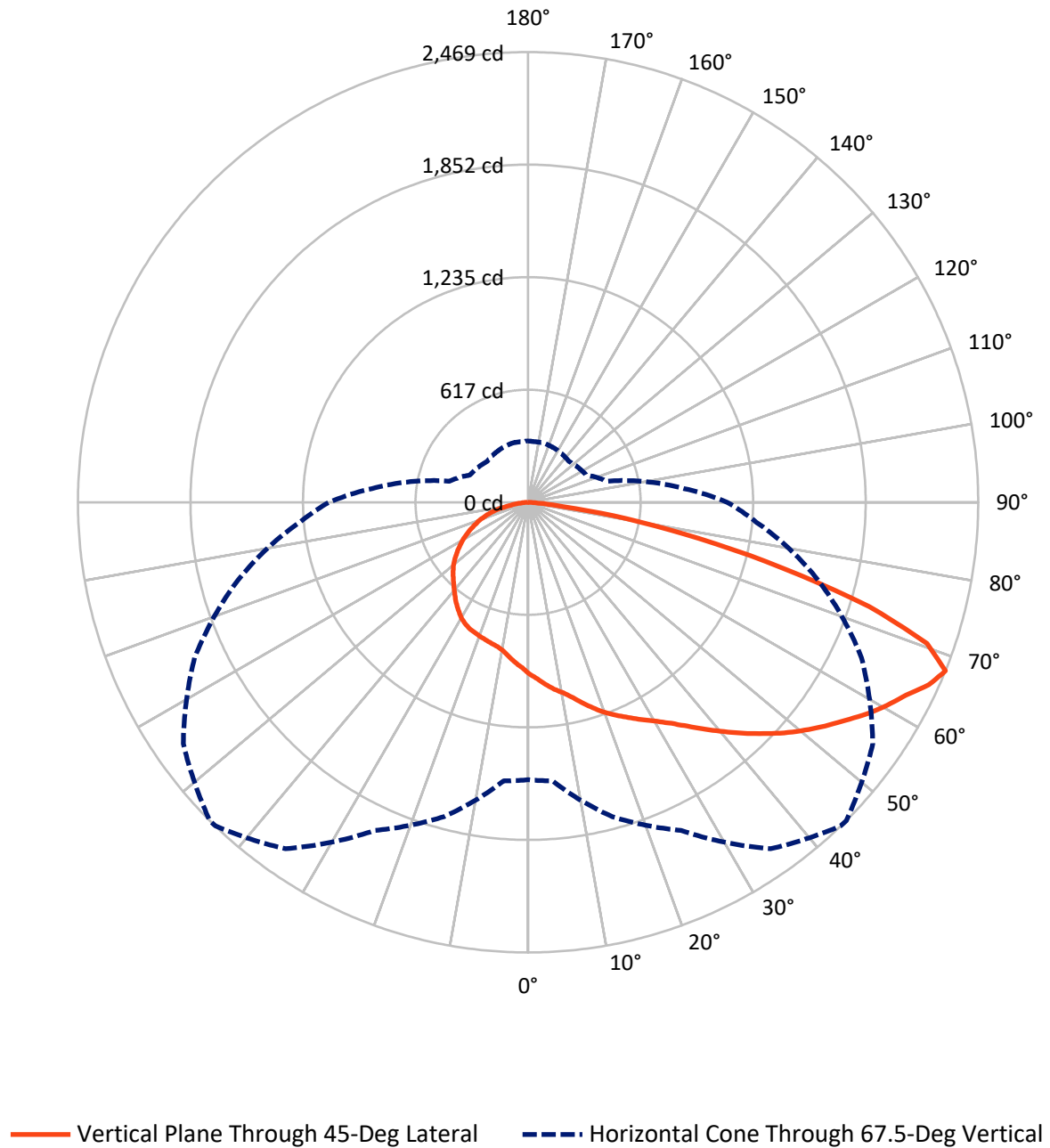


Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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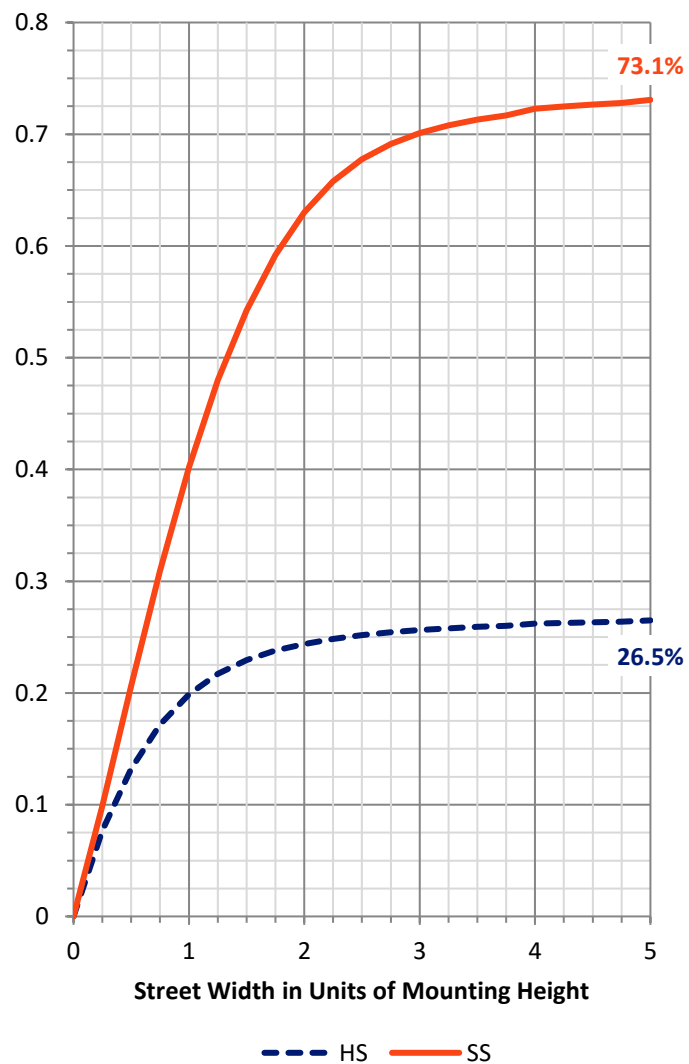
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1508.9	0.0	1508.9
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	4139.1	0.0	4139.1
	% Fixture	73.3	0.0	73.3
Total	Lumens	5648.0	0.0	5648.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.2	1.6
10°-20°	278.6	4.9
20°-30°	480.9	8.5
30°-40°	709.2	12.6
40°-50°	960.8	17.0
50°-60°	1174.3	20.8
60°-70°	1211.1	21.4
70°-80°	663.4	11.7
80°-90°	79.5	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°	5648.0	100.0
0°-180°	5648.0	100.0

Coefficient of Utilization



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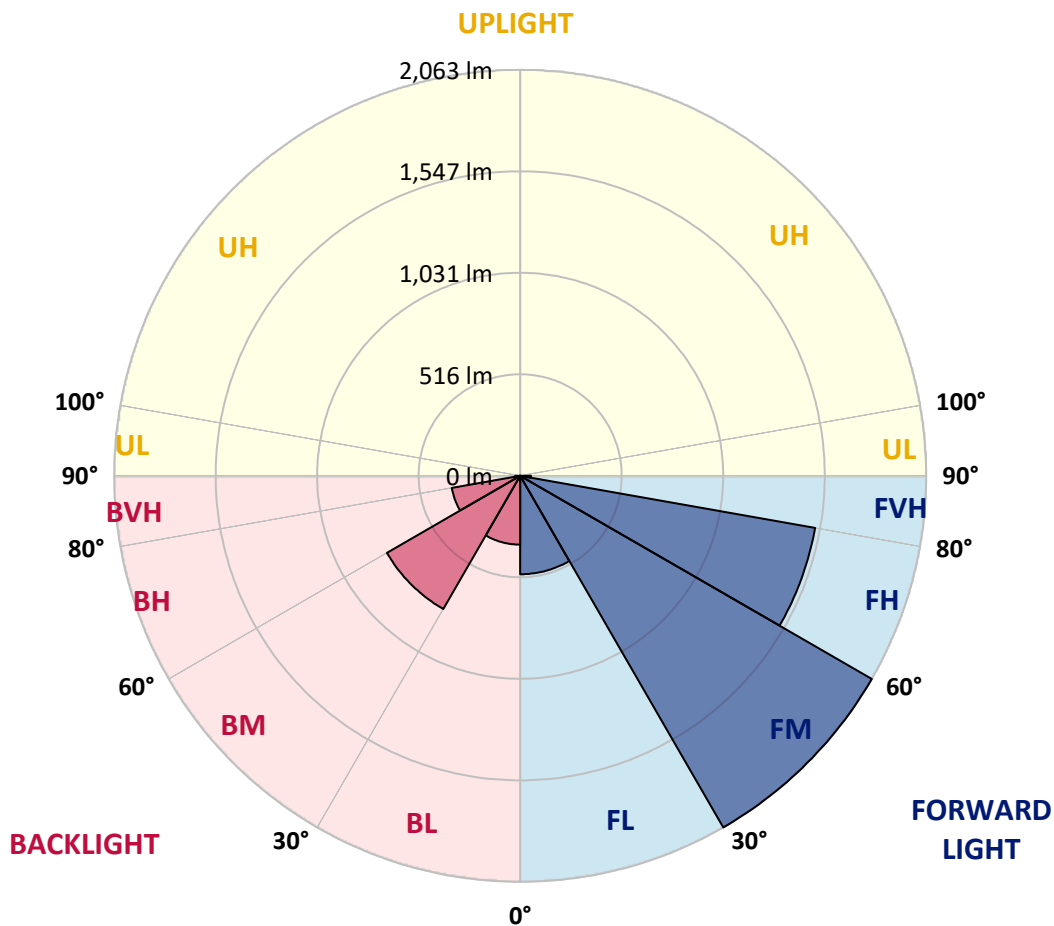
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	500.0	8.9			
FM	(30°-60°)	2062.7	36.5			
FH	(60°-80°)	1521.6	26.9			G1/1800
FVH	(80°-90°)	54.8	1.0			G1/100
BL	(0°-30°)	349.7	6.2	B1/500		
BM	(30°-60°)	781.6	13.8	B1/1000		
BH	(60°-80°)	352.9	6.2	B1/500		G1/500
BVH	(80°-90°)	24.7	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	942.0	942.0	942.0	942.0	942.0	942.0	942.0	942.0	942.0	942.0	942.0
2.5°	983.2	982.4	984.1	978.1	970.3	969.5	969.5	964.3	958.3	946.3	936.8
5°	1029.6	1027.9	1028.8	1020.2	1009.9	1004.7	1003.9	992.7	978.9	960.0	942.8
7.5°	1072.6	1070.9	1070.0	1060.6	1045.1	1036.5	1035.7	1019.3	1003.0	973.8	948.9
10°	1113.0	1111.3	1109.6	1096.7	1077.8	1064.9	1063.2	1042.5	1021.9	985.8	954.0
12.5°	1164.6	1161.1	1159.4	1144.0	1116.5	1102.7	1100.1	1072.6	1046.8	1003.0	964.3
15°	1218.7	1216.2	1213.6	1199.0	1168.0	1150.0	1145.7	1111.3	1076.1	1025.3	979.8
17.5°	1259.1	1256.5	1256.5	1243.7	1215.3	1194.7	1191.2	1150.0	1106.1	1046.0	991.8
20°	1284.0	1281.5	1284.0	1276.3	1254.8	1237.6	1234.2	1188.6	1136.2	1064.9	1002.1
22.5°	1302.1	1299.5	1303.8	1300.4	1284.9	1274.6	1272.0	1227.3	1167.2	1084.7	1012.5
25°	1333.9	1333.9	1333.9	1327.9	1313.3	1309.8	1309.8	1271.2	1206.7	1110.4	1027.9
27.5°	1397.5	1394.1	1389.8	1372.6	1347.6	1346.8	1351.9	1315.8	1252.2	1144.0	1046.8
30°	1491.2	1489.5	1473.1	1437.0	1394.9	1390.6	1394.1	1364.0	1301.2	1179.2	1068.3
32.5°	1612.4	1606.3	1572.8	1518.7	1458.5	1438.8	1445.6	1413.8	1352.8	1215.3	1088.9
35°	1698.3	1700.0	1676.0	1627.0	1555.6	1503.2	1508.4	1469.7	1408.7	1255.7	1114.7
37.5°	1797.2	1803.2	1767.1	1730.1	1663.9	1574.5	1579.7	1527.3	1464.5	1306.4	1142.2
40°	1933.8	1921.8	1860.8	1816.9	1743.9	1649.3	1653.6	1591.7	1529.0	1354.5	1174.0
42.5°	2048.1	2026.6	1952.7	1896.9	1809.2	1728.4	1732.7	1661.4	1594.3	1407.8	1209.3
45°	2212.3	2153.0	2046.4	2018.9	1876.2	1805.7	1810.0	1735.3	1663.1	1464.5	1247.1
47.5°	2307.7	2213.1	2145.2	2130.6	1950.1	1885.7	1890.8	1813.5	1737.0	1529.0	1286.6
50°	2301.7	2240.6	2220.9	2184.8	2015.5	1960.5	1965.6	1894.3	1811.8	1592.6	1324.4
52.5°	2262.1	2273.3	2263.0	2202.8	2080.8	2032.6	2038.7	1974.2	1888.3	1651.9	1359.7
55°	2323.1	2330.9	2311.1	2232.0	2153.0	2104.8	2111.7	2058.4	1963.9	1704.3	1389.8
57.5°	2396.2	2368.7	2348.9	2283.6	2227.7	2183.1	2190.8	2144.4	2029.2	1746.4	1413.0
60°	2392.8	2335.2	2354.9	2287.1	2278.5	2255.2	2262.1	2214.9	2079.1	1777.4	1422.4
62.5°	2216.6	2185.6	2285.3	2262.1	2319.7	2319.7	2328.3	2257.8	2109.1	1790.3	1417.3
65°	1910.6	1912.3	2087.7	2183.9	2368.7	2408.2	2415.1	2284.5	2092.0	1752.5	1369.1
67.5°	1522.1	1533.3	1785.1	1985.4	2319.7	2468.4	2469.3	2308.5	2018.0	1645.9	1257.4
70°	1113.9	1122.5	1419.8	1663.1	2088.5	2335.2	2321.4	2240.6	1857.3	1460.2	1082.9
72.5°	752.9	760.6	1066.6	1277.2	1713.8	1988.8	1958.7	1980.2	1583.1	1199.8	870.6
75°	506.2	515.7	758.9	913.6	1260.8	1510.1	1443.1	1499.8	1224.7	908.5	635.1
77.5°	318.9	324.9	482.2	599.1	861.2	1027.9	960.9	961.7	705.6	489.0	341.2
80°	202.8	204.6	292.2	345.5	498.5	618.0	546.6	444.3	318.0	259.6	203.7
82.5°	117.7	115.2	174.5	195.1	237.2	234.6	194.2	183.9	139.2	129.8	104.0
85°	47.3	43.8	76.5	71.3	72.2	76.5	56.7	56.7	45.6	35.2	25.8
87.5°	9.5	9.5	10.3	9.5	9.5	10.3	7.7	7.7	6.9	6.9	6.9
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°	942.0	942.0	942.0	942.0	942.0	942.0	942.0	942.0	942.0	942.0	942.0
2.5°	935.1	933.4	929.1	917.9	911.9	908.5	903.3	901.6	900.7	901.6	904.2
5°	937.7	931.7	919.6	901.6	889.6	881.8	873.2	869.8	867.2	867.2	869.8
7.5°	939.4	929.9	909.3	882.7	865.5	853.5	843.1	838.8	838.0	840.6	841.4
10°	940.3	926.5	897.3	863.8	841.4	826.0	815.6	813.1	815.6	820.8	821.7
12.5°	946.3	927.4	890.4	850.9	824.2	808.8	801.0	801.0	807.9	817.4	818.2
15°	956.6	933.4	887.0	840.6	813.1	799.3	796.7	801.0	811.3	826.0	827.7
17.5°	964.3	936.8	879.2	826.8	798.4	789.9	794.2	804.5	819.1	838.8	840.6
20°	969.5	936.8	868.1	810.5	783.8	782.1	794.2	810.5	826.0	849.2	851.7
22.5°	974.6	935.1	855.2	790.7	767.5	772.7	795.0	815.6	831.1	856.0	860.3
25°	984.1	937.7	842.3	770.9	750.3	764.9	794.2	819.1	835.4	861.2	868.1
27.5°	997.0	943.7	832.8	752.9	733.1	752.9	788.1	818.2	835.4	860.3	868.1
30°	1010.7	950.6	821.7	733.1	713.4	735.7	775.2	808.8	828.5	851.7	861.2
32.5°	1025.3	958.3	812.2	711.6	689.3	712.5	756.3	794.2	815.6	837.1	847.4
35°	1045.1	972.1	807.0	694.5	667.8	688.4	732.3	775.2	798.4	818.2	830.2
37.5°	1069.2	989.3	804.5	677.3	644.6	661.8	706.5	752.0	777.0	793.3	804.5
40°	1096.7	1010.7	803.6	660.9	621.4	634.3	679.8	725.4	749.5	762.4	771.8
42.5°	1127.6	1034.8	801.9	644.6	598.2	608.5	654.1	698.7	719.4	730.5	739.1
45°	1160.3	1058.9	798.4	624.8	573.3	585.3	627.4	666.9	688.4	697.9	707.3
47.5°	1192.9	1082.9	791.6	602.5	550.9	562.1	599.1	633.4	650.6	659.2	668.7
50°	1224.7	1104.4	775.2	576.7	527.7	538.0	566.4	589.6	602.5	609.4	618.8
52.5°	1253.1	1119.0	752.0	546.6	504.5	509.7	528.6	548.3	558.7	559.5	568.1
55°	1277.2	1126.8	718.5	515.7	479.6	480.4	490.8	506.2	510.5	507.1	513.1
57.5°	1290.9	1122.5	681.6	483.9	453.8	450.4	458.1	465.8	466.7	458.1	464.1
60°	1294.4	1102.7	633.4	452.1	428.0	418.6	421.1	419.4	417.7	414.3	419.4
62.5°	1277.2	1060.6	580.1	421.1	400.5	385.9	385.0	384.2	386.8	387.6	388.5
65°	1214.4	981.5	516.5	389.3	371.3	351.5	350.7	361.0	364.4	359.3	361.0
67.5°	1093.2	860.3	446.9	352.4	334.3	317.1	324.0	330.0	336.1	334.3	336.1
70°	921.4	706.5	383.3	311.1	293.9	284.5	292.2	297.4	298.2	296.5	298.2
72.5°	724.5	551.8	324.0	269.0	253.5	249.2	258.7	263.0	270.7	274.2	275.0
75°	523.4	407.4	265.6	223.5	210.6	210.6	219.2	226.9	233.8	229.5	226.9
77.5°	292.2	243.2	190.8	153.8	156.4	168.5	171.9	180.5	187.4	186.5	184.8
80°	177.1	152.1	128.9	99.7	98.8	108.3	130.6	145.3	148.7	141.0	140.1
82.5°	92.0	79.9	68.8	55.9	61.9	72.2	75.6	91.1	100.6	97.1	101.4
85°	23.2	22.3	24.9	25.8	31.8	35.2	38.7	45.6	30.1	14.6	14.6
87.5°	6.9	6.9	8.6	8.6	11.2	13.8	12.9	12.9	6.9	0.9	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)