

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: LUMARK

Report Number: P270264

Luminaire Tested: **NAV-AF-01-D-UNV-RW-7027-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P270264
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24161)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-AF-01-D-UNV-RW-7027-1200
Description: NAVION ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1200mA LIGHTSQUARE WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5950.7 lumens
Efficiency: N/A
Efficacy: 88.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 67
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: 25 FT

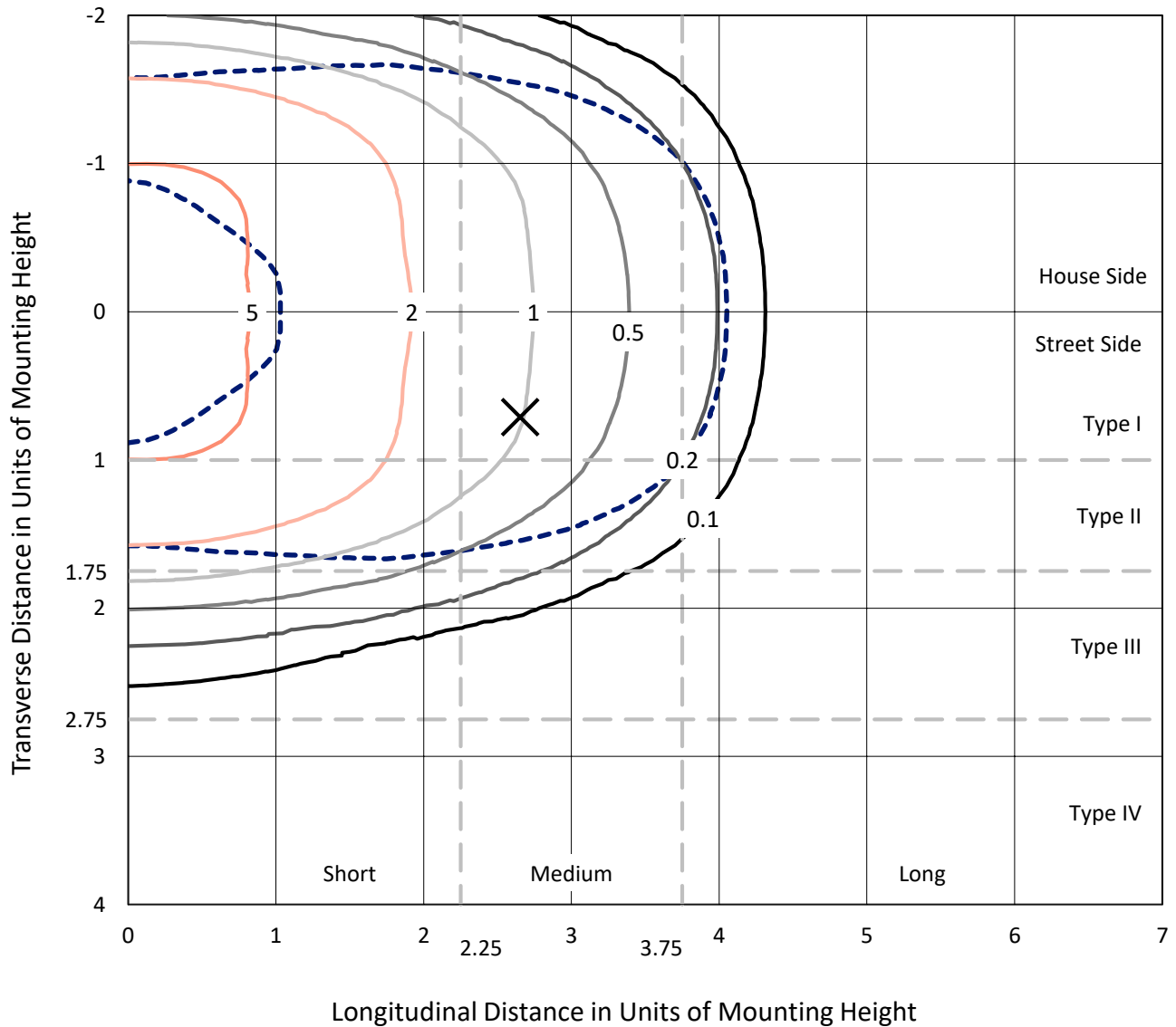


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Iso-Footcandle Lines of Horizontal Illumination

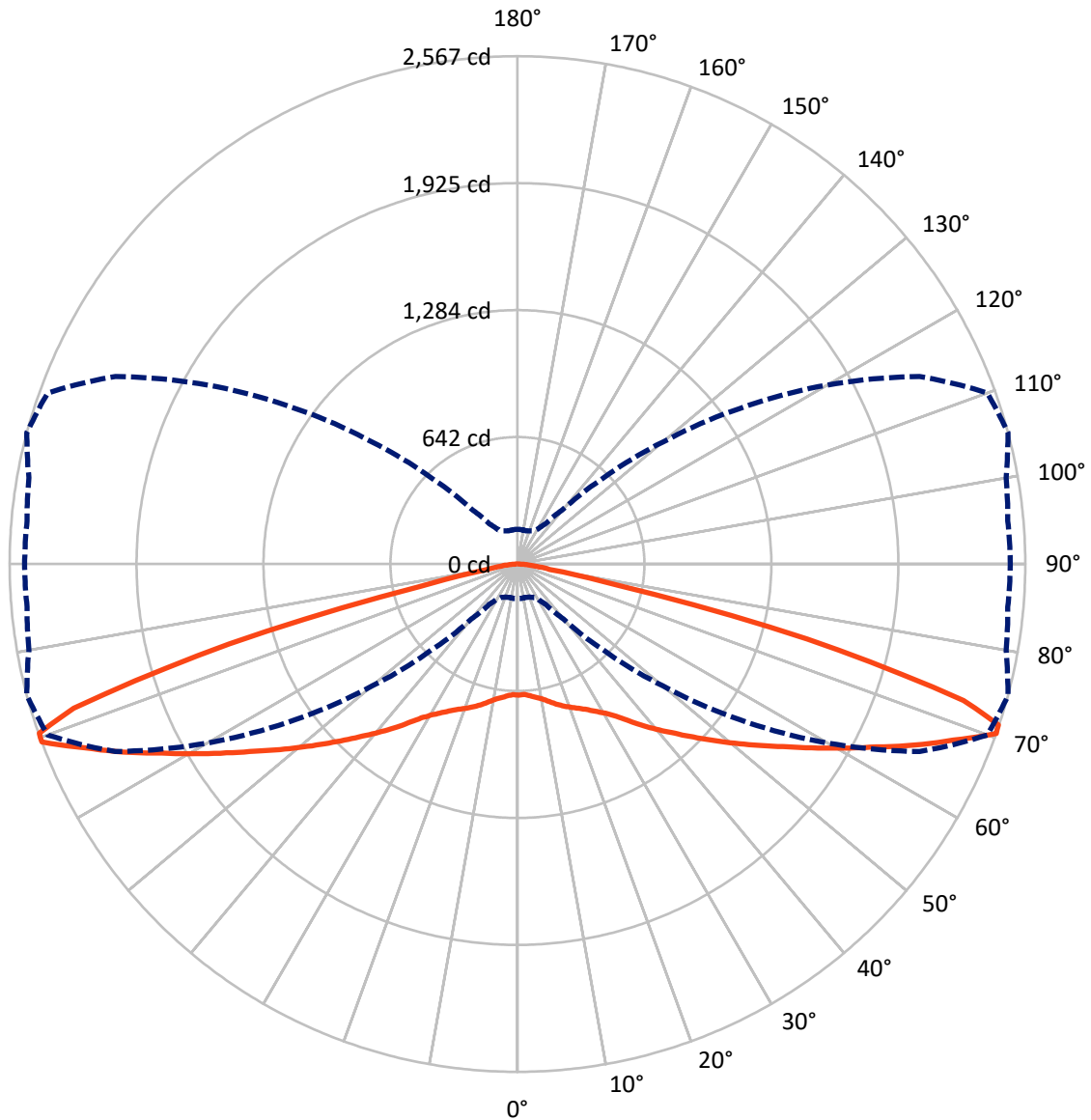
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.7 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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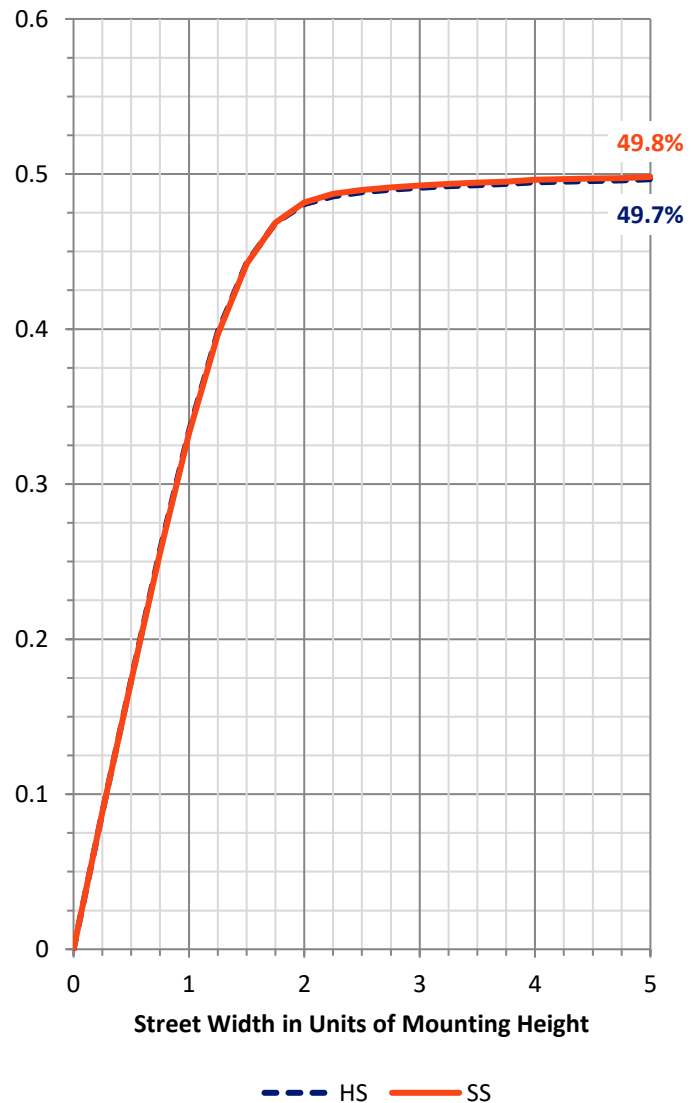
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2975.4	0.0	2975.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2975.4	0.0	2975.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	5950.7	0.0	5950.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.6	1.1
10°-20°	197.1	3.3
20°-30°	370.2	6.2
30°-40°	652.2	11.0
40°-50°	1080.9	18.2
50°-60°	1503.7	25.3
60°-70°	1419.5	23.9
70°-80°	606.3	10.2
80°-90°	57.3	1.0
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°	5950.7	100.0
0°-180°	5950.7	100.0

Coefficient of Utilization



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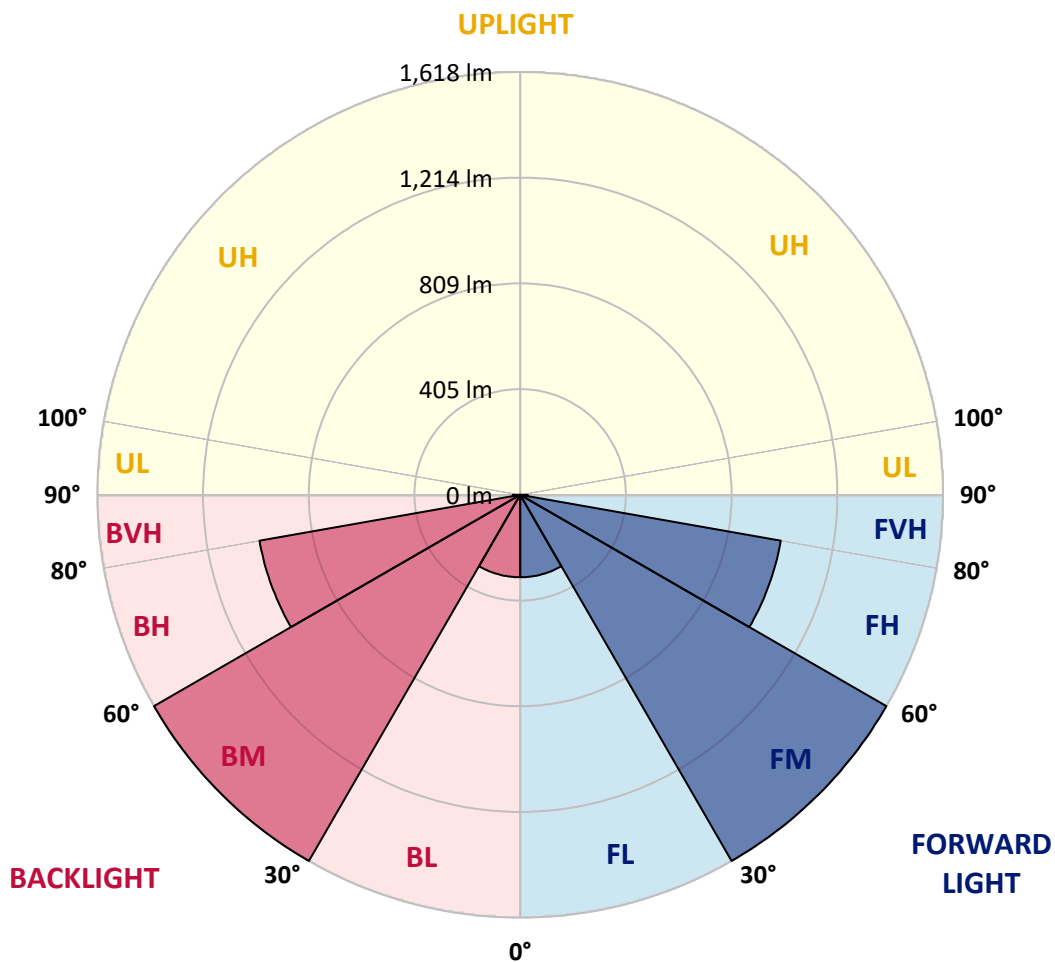
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	315.5	5.3			
FM	(30°-60°)	1618.4	27.2			
FH	(60°-80°)	1012.9	17.0			G1/1800
FVH	(80°-90°)	28.6	0.5			G1/100
BL	(0°-30°)	315.5	5.3	B1/500		
BM	(30°-60°)	1618.4	27.2	B2/2500		
BH	(60°-80°)	1012.9	17.0	B3/2500		G3/2500
BVH	(80°-90°)	28.6	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7
2.5°	666.8	666.5	666.8	665.6	666.1	665.6	665.6	664.1	664.1	663.4	662.3
5°	659.4	660.1	660.1	660.1	661.2	661.2	662.7	663.0	664.1	665.3	666.1
7.5°	647.0	647.4	648.4	649.3	651.5	654.4	657.5	660.9	663.8	667.5	671.7
10°	636.5	637.3	639.1	641.0	645.2	648.8	654.1	659.4	664.6	670.9	677.2
12.5°	631.0	632.0	635.1	638.1	644.4	649.3	656.3	664.6	671.7	677.6	684.7
15°	631.7	632.0	636.2	640.3	649.3	655.9	666.1	675.7	684.2	691.1	699.2
17.5°	642.6	643.2	647.4	653.3	662.0	670.6	681.4	691.3	703.0	710.7	720.5
20°	663.8	664.9	669.3	675.7	685.0	694.0	705.2	715.6	727.5	736.9	746.6
22.5°	691.3	693.2	698.2	705.9	715.2	726.1	737.6	748.5	759.6	768.9	777.2
25°	728.3	730.5	735.7	743.5	752.9	764.5	776.5	787.6	799.1	806.3	813.0
27.5°	777.9	781.6	787.3	793.6	801.7	814.0	825.3	834.5	845.8	853.6	858.2
30°	844.6	849.8	854.4	861.0	867.0	880.1	889.1	896.5	905.0	909.5	910.6
32.5°	926.3	931.2	935.7	940.4	948.7	960.6	969.2	973.4	977.7	977.0	973.0
35°	1018.4	1022.1	1024.7	1033.3	1046.7	1054.6	1061.0	1062.4	1063.1	1055.4	1047.6
37.5°	1115.3	1119.8	1122.2	1135.5	1148.3	1157.1	1160.2	1163.5	1161.2	1148.3	1134.0
40°	1220.2	1225.0	1231.8	1243.3	1258.3	1266.8	1270.6	1270.2	1268.2	1253.0	1229.9
42.5°	1323.2	1329.0	1334.6	1354.9	1367.1	1381.7	1383.5	1383.1	1379.1	1361.6	1334.6
45°	1410.3	1417.4	1429.1	1451.4	1471.2	1488.8	1495.8	1498.4	1494.3	1475.6	1445.1
47.5°	1482.4	1487.1	1501.7	1528.9	1554.2	1580.1	1594.2	1604.4	1604.0	1590.4	1558.0
50°	1531.6	1537.2	1555.1	1585.7	1617.4	1647.5	1675.5	1698.2	1709.0	1699.4	1669.2
52.5°	1545.8	1552.8	1576.3	1612.8	1649.7	1690.4	1732.2	1772.4	1796.7	1802.7	1779.2
55°	1486.1	1493.9	1528.1	1579.0	1639.6	1699.8	1763.2	1820.5	1870.5	1893.6	1884.4
57.5°	1312.3	1317.9	1361.6	1427.1	1514.1	1619.6	1726.3	1831.4	1917.2	1977.2	1987.6
60°	1037.8	1044.9	1092.7	1162.0	1260.9	1394.3	1543.5	1715.9	1883.9	2021.5	2089.7
62.5°	700.3	705.2	751.1	814.5	922.6	1051.2	1217.6	1435.8	1675.5	1921.3	2113.7
65°	367.6	367.6	398.7	443.0	529.2	644.4	814.9	1038.6	1323.8	1630.8	1952.6
67.5°	213.3	213.0	220.1	230.1	257.4	303.9	397.9	562.3	832.4	1189.5	1555.9
70°	176.0	174.9	173.8	173.8	177.9	185.1	202.8	248.0	362.8	613.5	957.2
71°	168.3	167.4	164.5	163.3	165.2	168.9	176.7	197.6	257.6	418.4	715.0
72.5°	158.9	157.1	152.5	150.6	151.1	152.5	154.8	163.0	181.3	238.0	407.7
75°	144.6	140.2	134.7	132.1	131.0	130.6	130.6	132.8	136.8	143.5	167.1
77.5°	128.3	121.9	116.1	113.4	111.5	110.4	109.7	108.2	107.3	110.4	118.9
80°	108.5	101.8	96.9	95.5	94.3	92.0	89.1	86.1	84.4	85.8	91.0
82.5°	83.9	77.3	78.0	78.3	76.4	72.8	69.8	66.4	63.1	62.3	64.9
85°	66.7	63.4	61.2	66.0	62.0	57.4	53.3	47.7	40.0	32.8	35.8
87.5°	28.7	29.0	41.9	63.1	55.2	44.3	36.9	29.9	19.0	14.2	14.6
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7
2.5°	662.0	662.0	660.9	660.1	660.1	660.1	659.4	659.6
5°	666.5	667.1	667.9	667.5	668.7	669.7	669.3	669.0
7.5°	673.9	676.2	678.3	679.5	680.9	682.4	682.8	681.8
10°	681.4	685.8	689.2	692.1	694.0	695.5	696.5	696.2
12.5°	690.6	696.9	703.0	708.9	713.1	715.2	717.4	716.8
15°	705.9	713.1	720.5	728.3	734.6	738.0	741.3	740.7
17.5°	726.8	733.1	739.1	746.9	754.8	758.4	762.2	761.9
20°	752.9	757.8	761.1	765.5	773.0	777.2	780.4	779.4
22.5°	782.8	784.2	784.6	786.0	792.0	796.9	801.4	802.5
25°	815.2	814.0	811.9	810.7	814.9	820.1	825.6	827.1
27.5°	855.5	851.8	846.2	841.7	842.8	849.4	855.8	857.3
30°	906.2	897.5	885.6	877.0	875.6	882.7	889.4	891.7
32.5°	964.1	952.5	936.0	923.0	917.3	923.6	929.7	933.0
35°	1032.6	1019.9	1000.2	983.4	974.4	978.6	988.9	992.6
37.5°	1113.9	1096.4	1074.4	1053.2	1038.3	1038.9	1050.1	1054.6
40°	1203.8	1178.3	1150.5	1124.0	1102.3	1100.9	1110.9	1114.3
42.5°	1297.4	1265.0	1232.1	1197.4	1170.6	1165.7	1178.8	1179.1
45°	1398.0	1356.4	1315.7	1275.4	1247.3	1238.9	1251.5	1253.0
47.5°	1505.5	1453.3	1405.2	1361.6	1331.3	1317.9	1330.2	1332.5
50°	1617.4	1563.3	1507.4	1458.8	1423.5	1407.0	1421.6	1423.0
52.5°	1728.1	1677.0	1621.4	1565.8	1522.9	1504.3	1521.5	1526.7
55°	1839.5	1790.3	1738.2	1682.5	1628.4	1612.1	1630.8	1636.4
57.5°	1955.6	1908.2	1860.8	1805.0	1752.4	1727.4	1747.6	1755.3
60°	2083.4	2041.7	1996.9	1940.7	1888.9	1859.8	1876.9	1885.8
62.5°	2209.1	2200.6	2160.0	2101.3	2035.7	2006.6	2021.1	2027.6
65°	2219.6	2358.7	2356.9	2298.7	2207.0	2158.1	2162.2	2165.2
67.5°	1937.3	2256.5	2460.5	2478.8	2376.6	2300.1	2291.1	2293.1
70°	1371.6	1809.7	2242.7	2526.9	2567.1	2507.9	2488.5	2491.4
71°	1098.9	1552.8	2029.5	2411.6	2564.1	2547.1	2536.3	2544.0
72.5°	701.4	1144.1	1608.1	2065.3	2358.0	2441.9	2454.2	2459.0
75°	254.7	492.2	833.1	1193.7	1512.9	1732.7	1853.5	1863.1
77.5°	136.8	176.3	272.5	407.2	511.7	567.5	574.2	576.9
80°	100.7	116.7	133.5	152.5	164.5	166.6	162.7	154.0
82.5°	71.2	80.6	87.2	94.0	98.9	94.7	78.7	60.0
85°	41.4	45.5	49.2	52.6	53.3	50.3	33.1	27.2
87.5°	16.3	17.8	17.5	19.8	19.0	17.5	13.0	11.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)