

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: P959990

Luminaire Tested: **NAV-SB1B-830-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959990
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-830-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5128.1 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 39.8
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



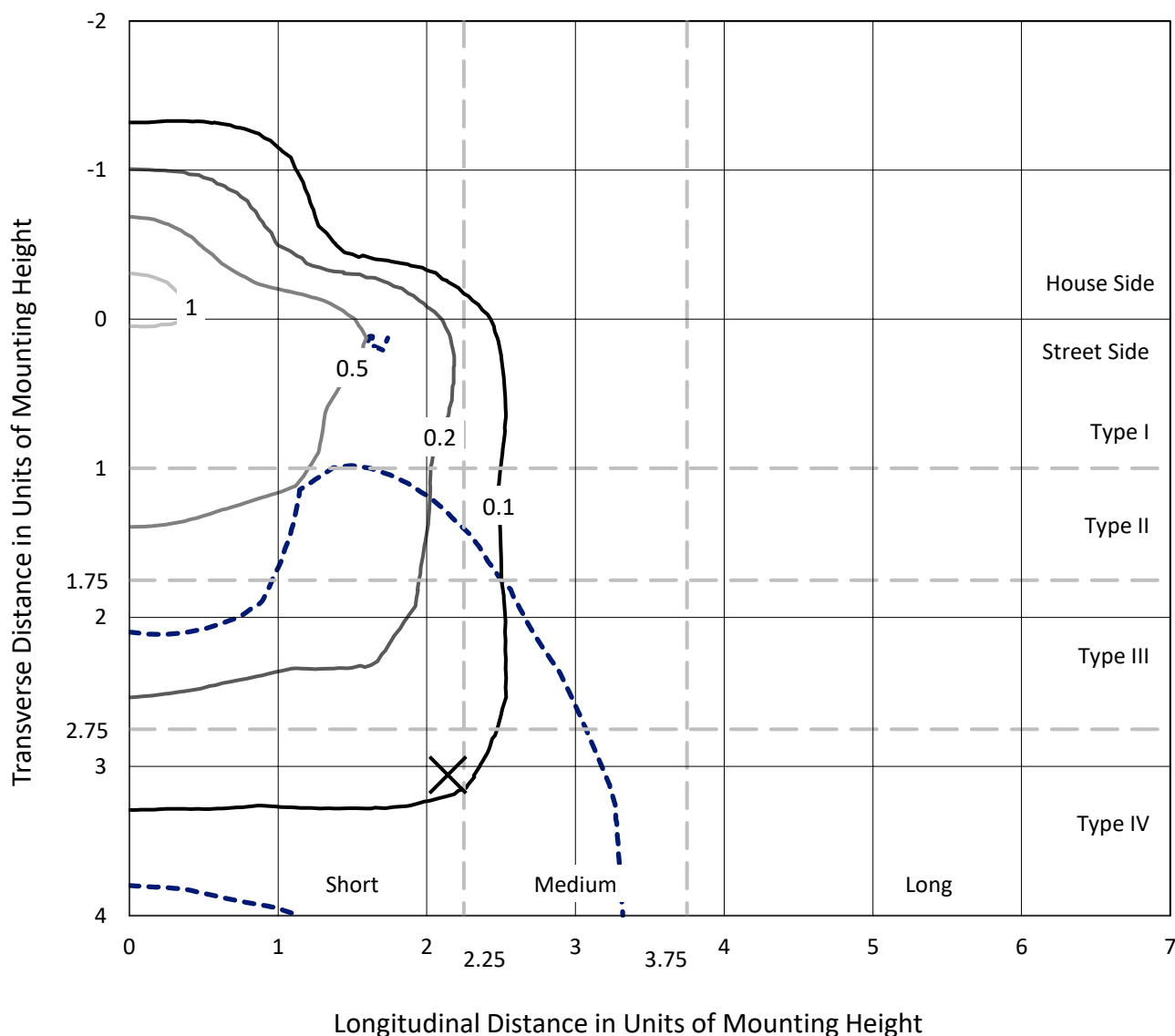
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

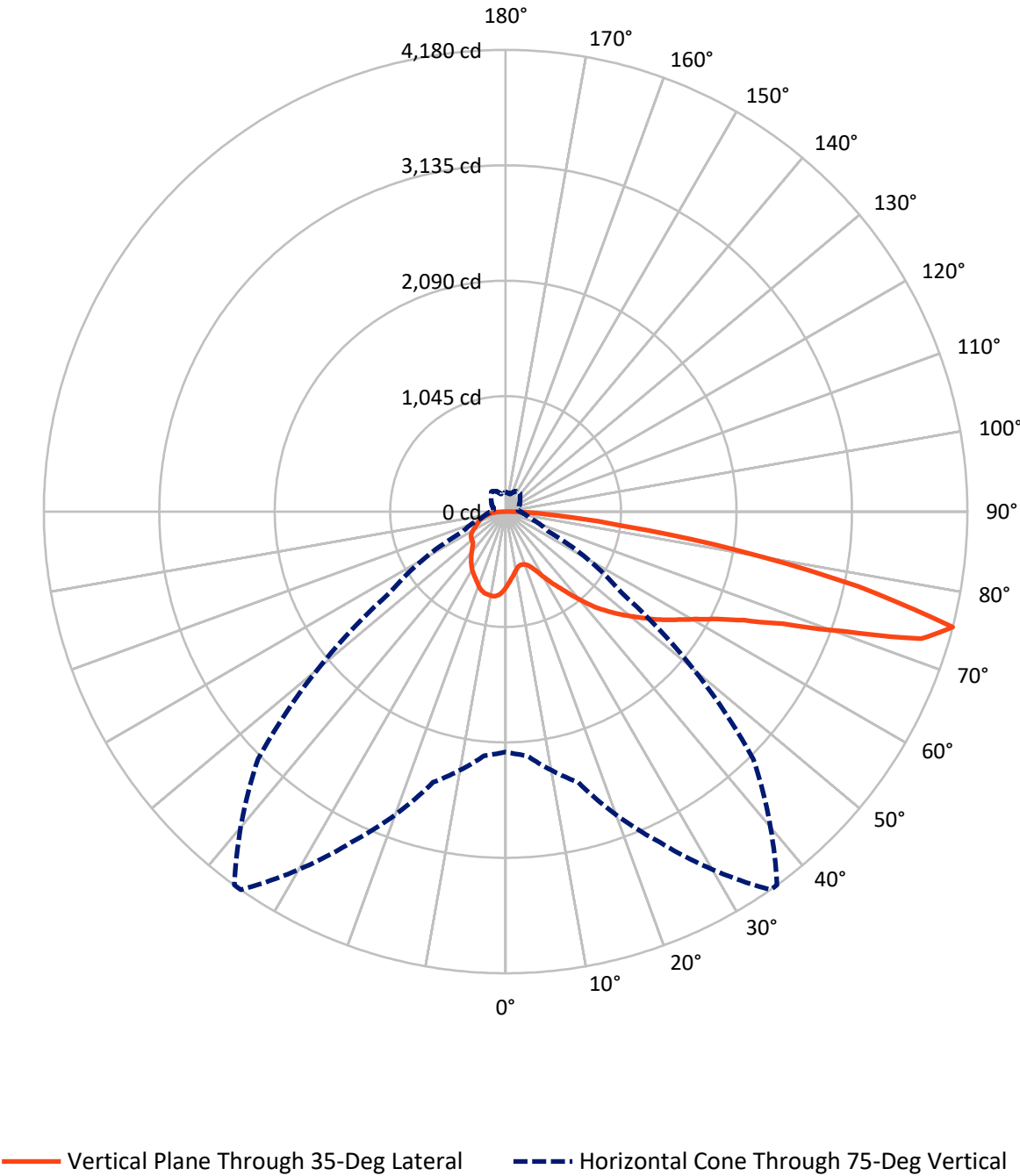


Based on 25 foot mounting height. Maximum calculated value = 1.2 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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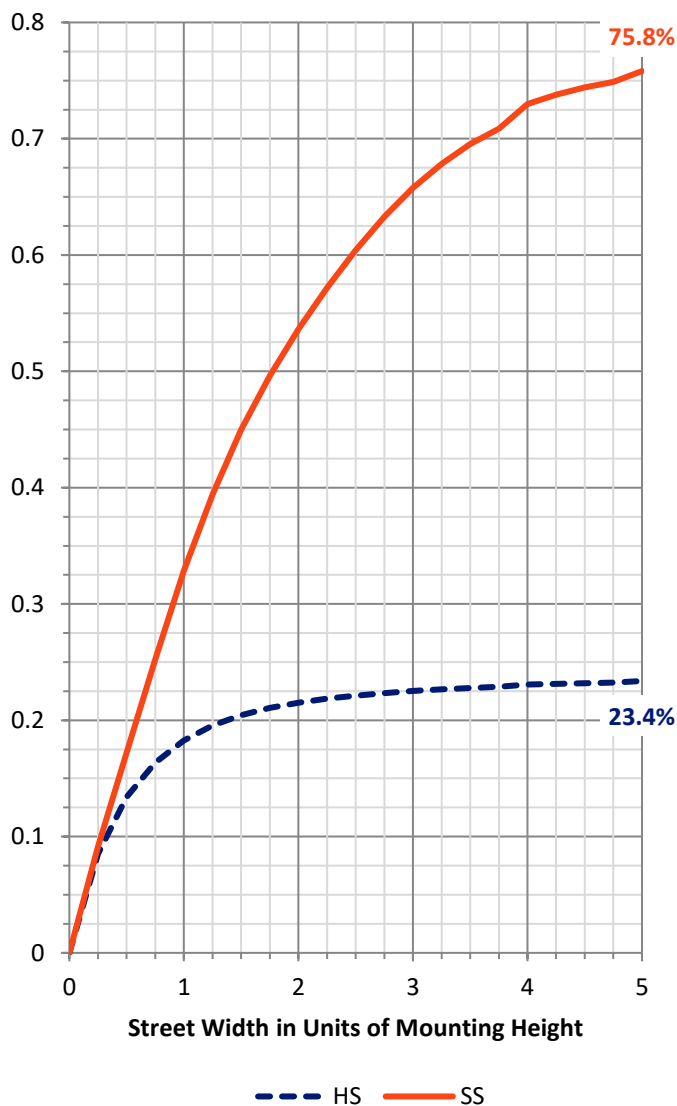
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1220.3	0.0	1220.3
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	3907.7	0.0	3907.7
	% Fixture	76.2	0.0	76.2
Total	Lumens	5128.1	0.0	5128.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.7	1.3
10°-20°	186.6	3.6
20°-30°	313.4	6.1
30°-40°	487.0	9.5
40°-50°	722.9	14.1
50°-60°	998.0	19.5
60°-70°	1210.8	23.6
70°-80°	1000.7	19.5
80°-90°	143.9	2.8
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°	5128.1	100.0
0°-180°	5128.1	100.0

Coefficient of Utilization



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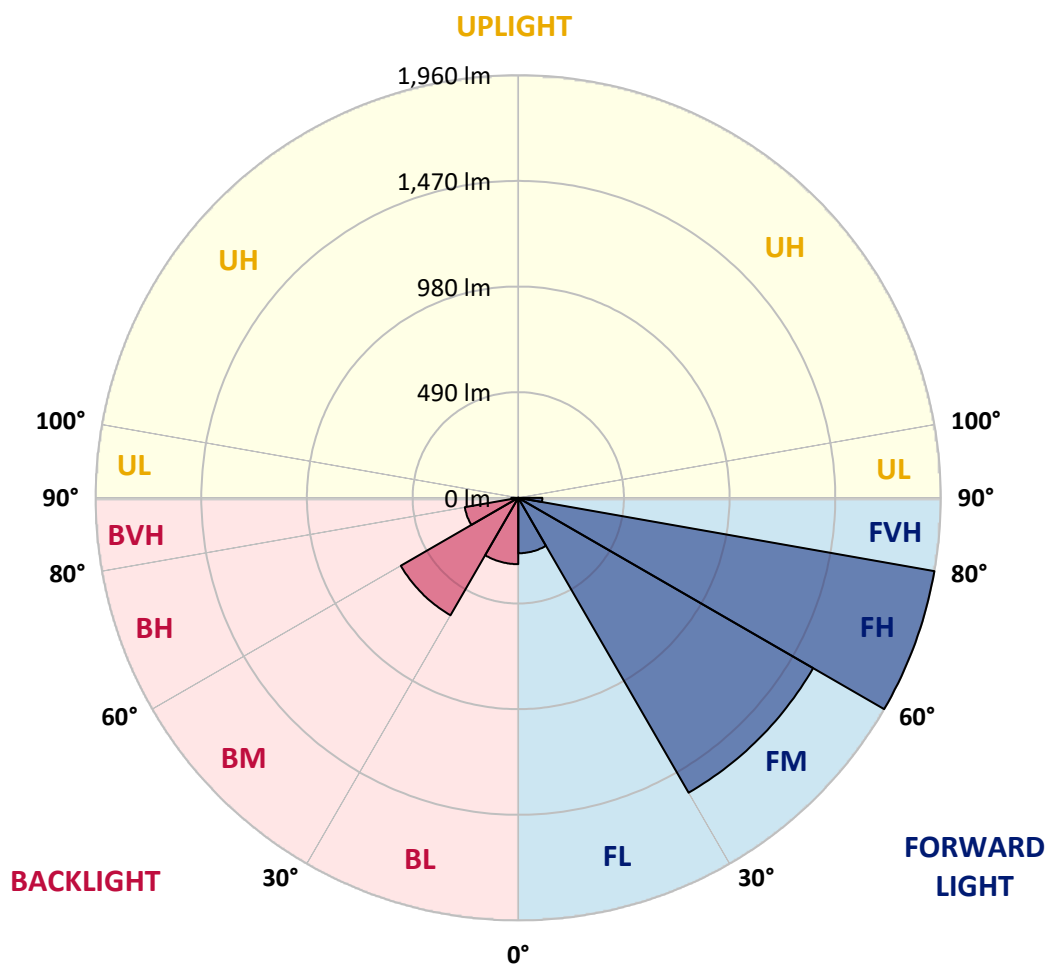
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	257.2	5.0			
FM	(30°-60°)	1579.2	30.8			
FH	(60°-80°)	1959.9	38.2			G2/5000
FVH	(80°-90°)	111.5	2.2			G2/225
BL	(0°-30°)	307.5	6.0	B1/500		
BM	(30°-60°)	628.8	12.3	B1/1000		
BH	(60°-80°)	251.6	4.9	B1/500		G1/500
BVH	(80°-90°)	32.4	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	683.4	683.4	683.4	683.4	683.4	683.4	683.4	683.4	683.4	683.4	683.4
2.5°	630.2	634.0	635.7	634.9	639.0	638.5	644.2	651.5	661.4	671.2	685.3
5°	581.6	585.8	589.4	592.7	600.8	603.2	612.3	626.3	644.5	663.1	686.4
7.5°	536.4	540.1	545.6	551.7	565.3	567.7	583.0	604.6	630.2	657.3	689.4
10°	499.6	503.2	509.0	515.9	532.8	535.9	555.2	584.1	617.4	651.8	692.8
12.5°	483.8	484.8	488.2	495.1	509.8	511.8	533.1	566.1	604.9	647.6	697.7
15°	482.9	485.1	485.4	489.0	501.2	502.0	521.7	554.4	597.2	646.8	705.2
17.5°	491.3	492.9	490.4	492.6	502.9	504.3	519.8	548.9	594.6	650.4	718.0
20°	513.4	514.8	507.3	504.3	511.8	512.9	528.1	552.5	597.2	657.8	735.4
22.5°	560.6	561.4	543.0	530.6	531.2	531.7	545.0	567.2	606.8	671.5	757.7
25°	634.0	633.4	604.3	580.3	566.3	563.3	572.2	591.0	623.2	689.4	786.2
27.5°	720.0	715.8	686.6	650.7	620.4	616.0	614.1	622.1	646.5	713.3	821.1
30°	816.9	813.1	781.8	734.6	692.8	685.5	667.3	663.1	681.1	745.7	869.6
32.5°	923.4	921.0	883.6	826.4	770.4	762.1	731.3	720.3	734.3	794.8	937.3
35°	1012.7	1010.4	979.4	920.7	852.2	841.9	810.6	798.2	805.3	857.7	1025.7
37.5°	1093.4	1092.2	1065.6	1019.4	948.6	936.1	901.0	896.8	895.4	940.6	1133.0
40°	1168.2	1165.4	1137.8	1113.4	1060.9	1049.6	1018.5	1015.0	1004.4	1042.6	1254.4
42.5°	1251.1	1243.9	1203.7	1192.3	1178.2	1168.8	1150.2	1150.8	1127.5	1157.6	1383.0
45°	1318.8	1314.6	1273.3	1266.6	1281.9	1278.0	1294.1	1298.3	1253.1	1278.3	1516.7
47.5°	1391.3	1387.5	1352.6	1347.9	1389.2	1390.3	1447.1	1448.5	1375.6	1403.5	1650.6
50°	1480.9	1475.4	1440.7	1446.6	1492.8	1497.0	1600.9	1591.5	1488.4	1530.8	1783.4
52.5°	1540.0	1543.3	1535.8	1545.2	1608.4	1612.3	1752.3	1728.2	1600.1	1656.4	1913.7
55°	1583.5	1590.2	1613.5	1635.1	1730.4	1734.3	1895.1	1858.2	1692.7	1772.8	2036.2
57.5°	1639.5	1630.1	1673.6	1715.7	1846.3	1856.6	2034.0	1983.5	1774.8	1873.2	2120.2
60°	1719.8	1713.2	1747.0	1809.4	1976.0	1992.4	2180.9	2096.3	1835.0	1952.7	2136.5
62.5°	1882.9	1866.2	1871.5	1926.7	2139.6	2161.2	2346.6	2194.7	1864.9	1983.8	2049.0
65°	2126.6	2098.0	2071.4	2109.7	2370.0	2391.3	2533.8	2272.1	1853.8	1923.6	1816.4
67.5°	2433.5	2405.2	2372.5	2408.5	2709.3	2726.2	2764.7	2315.7	1766.5	1691.9	1405.3
70°	2686.5	2676.0	2715.1	2863.4	3251.3	3251.8	3060.8	2279.6	1527.2	1199.6	813.1
72.5°	2653.0	2646.7	2852.6	3311.2	3934.4	3919.6	3341.1	2006.8	1028.8	541.1	304.6
75°	2176.5	2217.8	2536.9	3303.1	4179.6	4177.7	3169.5	1275.8	425.6	224.3	157.4
77.5°	1167.1	1232.6	1647.0	2438.7	3262.9	3312.0	2228.4	446.3	182.7	143.6	109.0
80°	380.6	437.8	656.4	1241.7	2120.2	2111.1	955.0	175.2	125.0	101.8	75.4
82.5°	161.6	168.3	293.3	586.3	1088.1	1071.2	304.1	100.7	87.8	69.6	46.5
85°	63.2	70.7	129.5	271.1	471.3	461.0	109.8	49.9	56.3	45.5	27.7
87.5°	20.8	25.2	46.3	92.9	146.7	141.3	26.9	17.2	24.4	20.8	9.9
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°	683.4	683.4	683.4	683.4	683.4	683.4	683.4	683.4	683.4	683.4	683.4
2.5°	689.2	693.6	698.8	706.6	713.3	718.8	724.7	728.3	729.7	733.8	733.5
5°	694.1	703.9	716.9	729.7	742.1	749.6	756.2	759.6	762.6	764.9	765.4
7.5°	702.4	714.9	735.4	752.1	762.6	768.7	773.2	772.0	773.2	773.8	774.6
10°	709.7	727.1	751.5	767.3	775.4	775.6	774.6	770.7	768.7	769.1	769.6
12.5°	718.3	737.7	764.0	777.4	779.5	773.5	768.7	762.1	759.6	758.5	757.9
15°	729.9	752.1	777.6	782.6	777.1	769.3	761.3	750.4	744.9	740.5	741.9
17.5°	744.0	768.4	788.1	784.5	772.6	759.8	746.8	730.5	719.1	714.4	714.6
20°	763.7	785.7	796.2	780.3	762.4	742.9	720.8	700.8	690.2	685.5	685.0
22.5°	787.6	808.6	803.9	773.2	747.6	716.6	688.9	674.2	668.9	665.6	666.1
25°	816.1	834.1	809.4	762.6	723.5	681.7	660.3	655.6	653.1	650.7	650.7
27.5°	853.3	862.9	813.6	747.1	685.8	644.5	636.7	637.7	636.7	632.6	633.4
30°	902.3	900.5	817.5	721.9	642.6	611.0	611.5	615.2	615.7	612.9	614.3
32.5°	967.0	947.3	819.5	689.2	601.3	581.6	582.2	586.1	588.9	584.1	586.3
35°	1045.1	1001.8	816.4	648.1	569.4	553.6	549.5	550.5	551.3	546.9	550.0
37.5°	1136.3	1063.1	802.9	602.7	543.0	526.1	517.3	509.8	505.3	501.2	504.0
40°	1236.5	1130.0	777.9	558.3	513.7	497.0	483.8	469.7	454.7	449.1	451.6
42.5°	1341.2	1198.7	747.6	515.9	479.9	466.3	452.1	431.6	409.2	397.8	399.2
45°	1449.9	1269.2	718.0	474.1	445.3	439.4	423.0	398.4	374.0	359.6	358.4
47.5°	1556.4	1335.7	674.4	431.9	412.8	419.1	406.4	383.7	356.5	333.7	331.3
50°	1658.0	1398.0	603.2	389.2	386.4	413.1	400.9	368.2	337.1	308.0	305.4
52.5°	1759.0	1448.5	512.0	350.4	372.3	411.4	393.7	357.6	319.6	289.2	285.8
55°	1844.6	1474.6	424.1	317.1	351.8	397.3	385.1	345.1	295.0	262.5	259.7
57.5°	1893.4	1453.4	351.0	284.4	323.5	374.0	370.3	318.6	265.6	240.7	237.3
60°	1872.4	1368.1	291.1	255.8	296.6	348.7	344.9	292.2	243.1	219.6	216.3
62.5°	1756.2	1205.4	243.6	230.9	272.2	323.0	319.4	271.9	225.9	203.2	199.6
65°	1522.2	980.5	206.8	210.1	247.5	291.9	297.1	255.0	212.4	190.1	186.5
67.5°	1161.0	710.2	177.9	192.1	223.4	261.4	276.6	242.8	201.0	179.9	176.6
70°	661.7	403.3	153.5	174.7	202.1	233.2	260.9	233.2	188.8	171.3	169.1
72.5°	250.9	185.2	132.8	157.2	181.6	209.3	243.4	217.9	174.7	161.6	159.4
75°	133.9	112.9	111.7	136.6	158.1	186.0	221.5	203.0	164.1	170.8	176.3
77.5°	91.2	79.8	93.4	117.0	132.2	160.2	198.2	180.2	142.2	141.7	130.6
80°	63.2	56.6	76.0	94.3	102.3	134.7	173.0	154.7	115.9	108.1	103.4
82.5°	38.0	36.9	56.8	70.4	72.4	103.9	143.3	129.8	94.8	82.6	83.1
85°	20.8	21.9	36.3	41.3	42.1	72.7	112.2	100.3	72.9	61.3	61.8
87.5°	5.8	7.5	13.3	16.4	20.2	37.7	66.8	59.6	36.6	25.5	25.5
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)