

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: P885176

Luminaire Tested: **NAV-SB6B-830-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885176
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6B-830-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21838 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

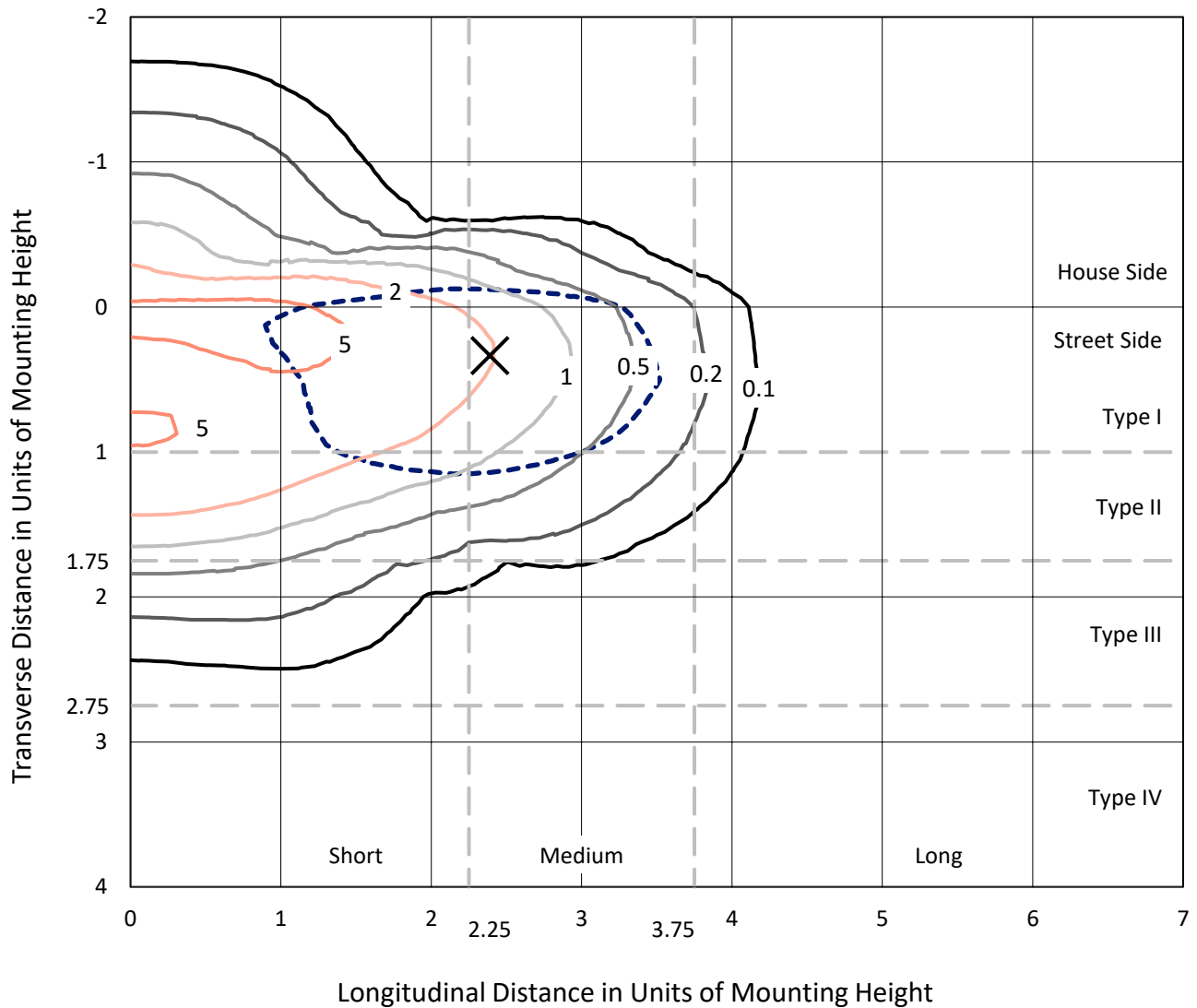
Input Watts (W): 220.4
Input Voltage (V): 120.0
Input Current (Ain): 1.838
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

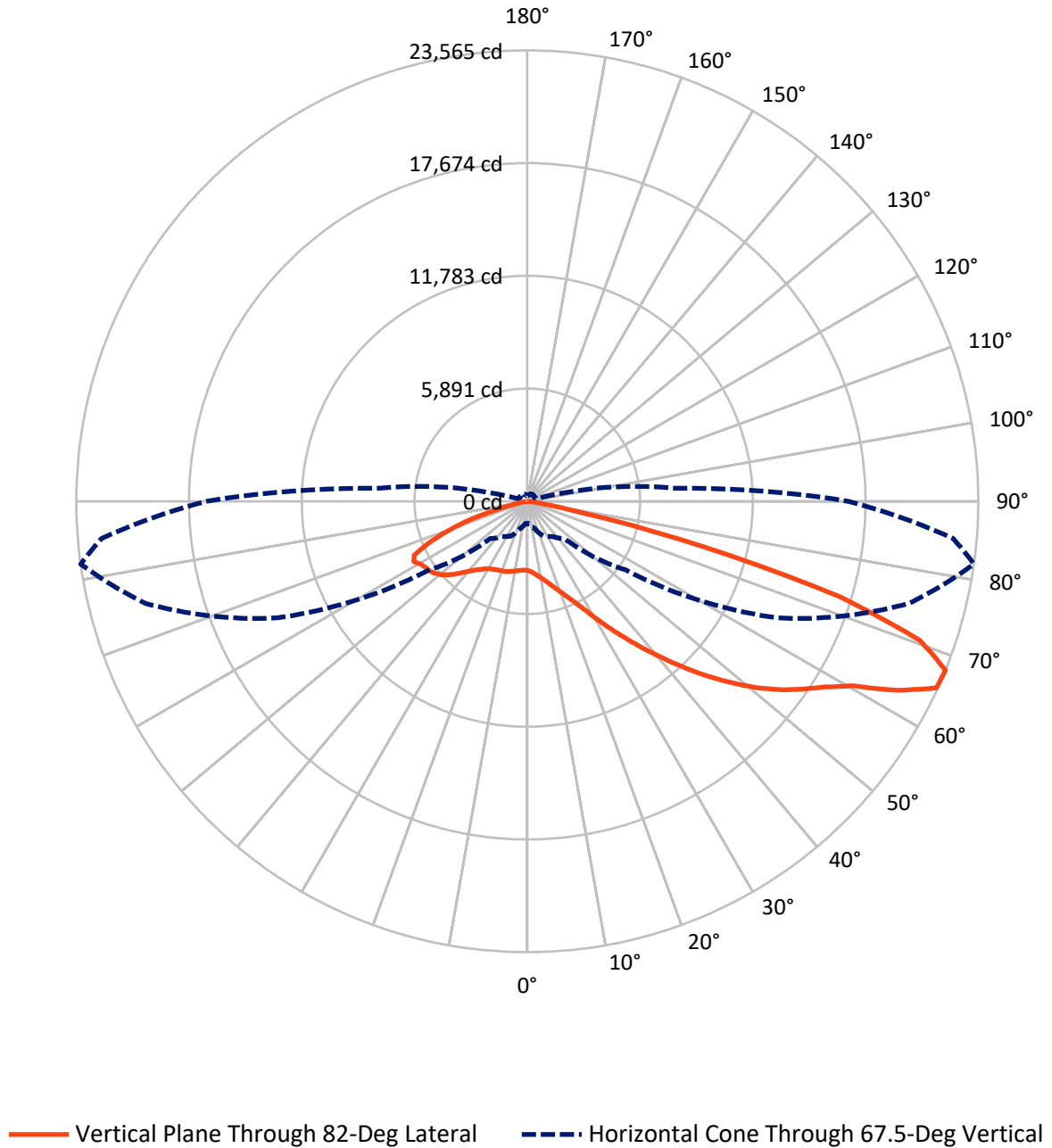
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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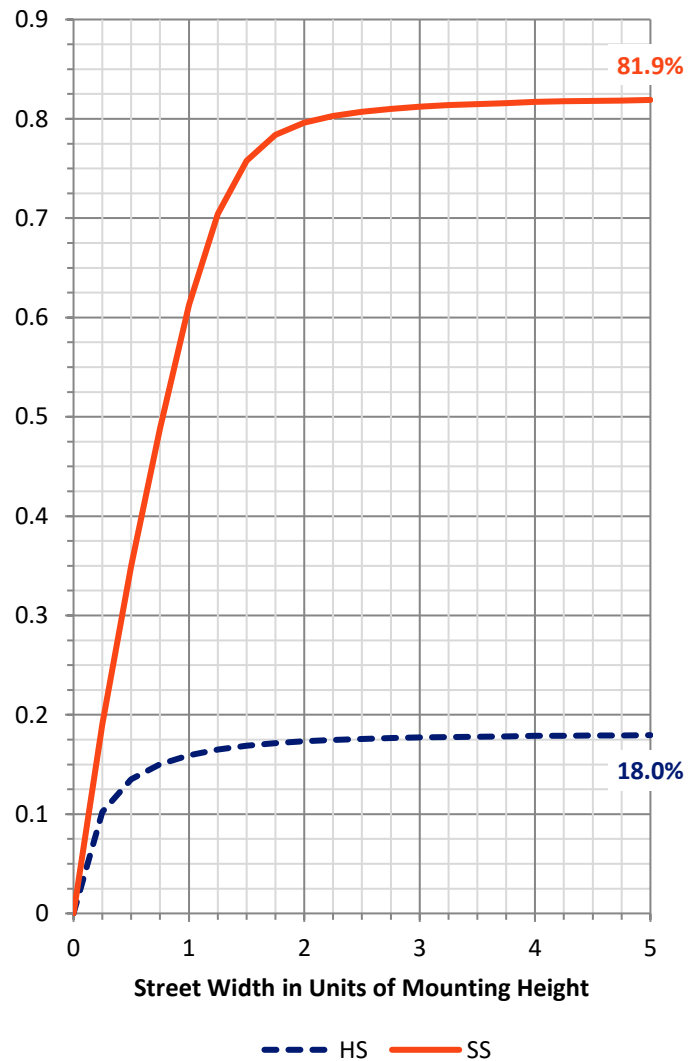
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3955.8	0.0	3955.8
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	17882.2	0.0	17882.2
	% Fixture	81.9	0.0	81.9
Total	Lumens	21838.0	0.0	21838.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	322.3	1.5
10°-20°	837.6	3.8
20°-30°	1341.5	6.1
30°-40°	2372.2	10.9
40°-50°	4156.4	19.0
50°-60°	5543.5	25.4
60°-70°	5160.7	23.6
70°-80°	1980.7	9.1
80°-90°	123.0	0.6
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°	21838.0	100.0
0°-180°	21838.0	100.0

Coefficient of Utilization



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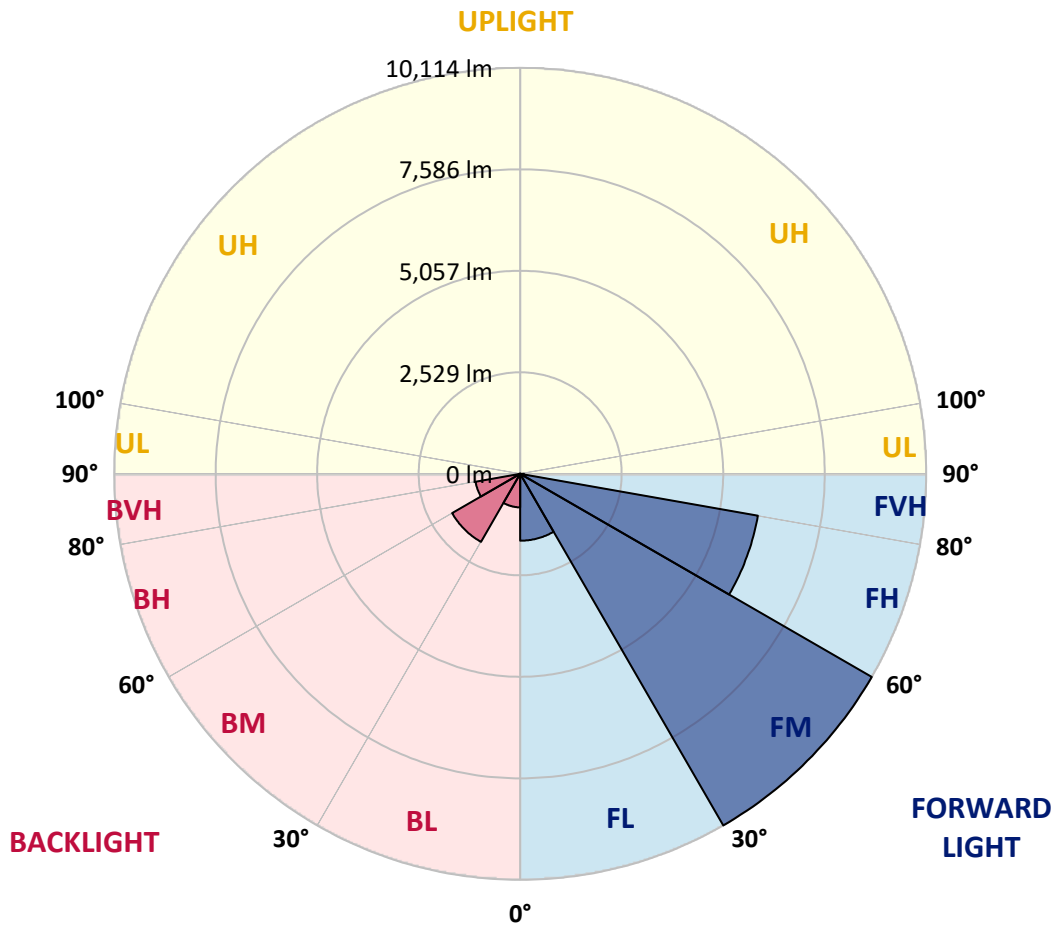
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1666.0	7.6			
FM (30°-60°)	10114.5	46.3			
FH (60°-80°)	6012.3	27.5			G3/7500
FVH (80°-90°)	89.4	0.4			G1/100
BL (0°-30°)	835.4	3.8	B2/1000		
BM (30°-60°)	1957.7	9.0	B2/2500		
BH (60°-80°)	1129.0	5.2	B3/2500		G3/2500
BVH (80°-90°)	33.6	0.2			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°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3617.8	3617.8	3617.8	3617.8	3617.8	3617.8	3617.8	3617.8	3617.8	3617.8	3617.8
2.5°	3823.8	3845.8	3833.2	3826.9	3815.9	3800.2	3787.6	3748.3	3707.4	3680.7	3671.3
5°	3900.8	3922.8	3921.3	3927.6	3935.4	3940.1	3937.0	3893.0	3834.8	3789.2	3762.5
7.5°	3834.8	3859.9	3880.4	3911.8	3966.9	4025.0	4053.3	4043.9	3984.2	3921.3	3888.2
10°	3647.7	3674.4	3723.2	3797.1	3913.4	4039.2	4144.5	4193.3	4155.5	4086.4	4040.8
12.5°	3304.9	3331.7	3427.6	3587.9	3782.9	4001.5	4202.7	4333.2	4342.6	4273.5	4220.0
15°	2919.7	2946.5	3048.7	3249.9	3547.1	3897.7	4234.2	4481.0	4564.3	4504.6	4440.1
17.5°	2680.7	2704.3	2781.4	2943.3	3253.0	3690.1	4223.1	4638.2	4828.5	4781.3	4704.3
20°	2608.4	2628.9	2665.0	2778.2	3036.1	3474.7	4150.8	4786.0	5113.1	5086.3	4999.9
22.5°	2685.5	2704.3	2715.3	2765.6	2927.6	3333.2	4059.6	4937.0	5443.2	5446.4	5341.0
25°	2863.1	2882.0	2869.4	2900.9	2971.6	3289.2	4025.0	5114.6	5858.3	5892.9	5773.4
27.5°	3155.6	3157.1	3127.3	3125.7	3136.7	3355.2	4061.2	5304.9	6381.9	6446.4	6298.6
30°	3742.0	3718.4	3603.7	3479.5	3422.9	3553.4	4161.8	5529.7	6999.8	7114.6	6929.0
32.5°	4646.1	4611.5	4400.8	4103.7	3804.9	3872.5	4342.6	5786.0	7672.7	7880.3	7653.9
35°	5627.2	5617.8	5397.6	4955.8	4433.8	4326.9	4636.7	6122.5	8407.0	8737.2	8468.3
37.5°	6539.1	6534.4	6408.6	5888.2	5253.0	4960.5	5108.3	6562.7	9193.1	9671.1	9353.5
40°	7372.4	7386.6	7260.8	6795.4	6155.5	5773.4	5749.8	7106.7	10067.3	10688.4	10311.0
42.5°	8092.5	8108.3	7980.9	7636.6	7047.0	6672.8	6537.5	7773.4	10921.1	11781.1	11334.6
45°	8581.5	8679.0	8660.1	8385.0	7962.0	7573.7	7484.1	8609.8	11894.3	12939.9	12416.3
47.5°	8719.9	8809.5	8951.0	8988.7	8730.9	8348.8	8455.7	9617.6	12878.6	14100.2	13504.3
50°	8378.7	8462.0	8756.0	9147.5	9326.8	9208.8	9400.7	10697.8	13886.4	15257.4	14571.9
52.5°	7705.7	7790.7	8161.7	8781.2	9512.3	9883.4	10348.8	11762.2	14862.8	16353.3	15582.9
55°	6732.5	6822.1	7298.5	7999.8	9158.5	10161.6	11139.6	12825.1	15757.4	17339.1	16494.8
57.5°	5408.6	5474.7	5969.9	6951.1	8268.6	9884.9	11722.9	13985.4	16600.1	18307.6	17398.9
60°	3525.1	3583.2	4158.7	5253.0	6793.8	8960.4	11839.3	15279.4	17719.6	19567.0	18617.4
62.5°	2344.3	2383.6	2724.8	3528.2	4784.4	7185.3	11158.5	16312.4	19361.1	21758.8	20706.9
65°	1608.4	1647.8	1988.9	2548.7	3091.1	4753.0	9201.0	16175.6	20848.4	23499.3	22255.6
67.5°	1147.8	1180.8	1470.1	1998.4	2237.4	2760.9	6237.2	14427.2	20634.6	23565.3	22339.0
70°	822.3	841.2	1080.2	1556.6	1778.2	1658.8	3468.5	11034.3	18067.1	21760.4	20637.8
72.5°	575.5	581.7	750.0	1185.5	1432.3	1210.7	1650.9	7356.7	13664.7	17079.7	15999.5
75°	389.9	397.8	504.7	869.5	1149.3	924.5	874.2	3944.9	8021.8	9454.1	8474.6
77.5°	239.0	242.1	325.5	594.3	860.0	704.4	562.9	1671.3	3103.7	3047.1	2597.4
80°	135.2	135.2	207.5	369.5	586.5	454.4	394.6	710.7	982.7	863.2	761.0
82.5°	75.5	77.0	150.9	229.6	388.4	268.9	217.0	328.6	424.5	375.8	327.0
85°	31.4	34.6	92.8	108.5	185.5	133.6	88.0	138.4	157.2	139.9	102.2
87.5°	3.1	4.7	28.3	20.4	22.0	26.7	12.6	26.7	22.0	22.0	15.7
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°	3617.8	3617.8	3617.8	3617.8	3617.8	3617.8	3617.8	3617.8	3617.8	3617.8	3617.8
2.5°	3641.4	3617.8	3558.1	3488.9	3397.7	3353.7	3293.9	3253.0	3218.5	3221.6	3190.2
5°	3712.2	3652.4	3518.8	3352.1	3144.6	2996.8	2839.5	2731.1	2643.0	2624.1	2581.7
7.5°	3809.6	3715.3	3481.0	3180.7	2830.1	2564.4	2327.0	2174.5	2066.0	2031.4	1996.8
10°	3935.4	3798.6	3432.3	2965.3	2460.6	2122.6	1867.9	1748.4	1674.5	1649.3	1630.5
12.5°	4081.6	3894.5	3367.8	2702.8	2080.1	1754.7	1592.7	1533.0	1509.4	1501.5	1496.8
15°	4265.6	4014.0	3270.3	2391.4	1757.8	1529.8	1460.6	1452.8	1455.9	1452.8	1451.2
17.5°	4484.1	4144.5	3111.5	2070.7	1540.8	1415.1	1389.9	1396.2	1404.0	1402.5	1399.3
20°	4723.1	4273.5	2908.7	1786.1	1393.0	1333.3	1319.1	1325.4	1331.7	1328.6	1327.0
22.5°	4995.1	4411.8	2683.9	1564.4	1294.0	1257.8	1242.1	1243.7	1243.7	1237.4	1234.2
25°	5320.6	4564.3	2448.0	1407.2	1218.5	1190.2	1171.3	1165.1	1155.6	1136.8	1133.6
27.5°	5709.0	4726.3	2221.6	1297.1	1158.8	1132.0	1110.0	1094.3	1070.7	1039.3	1036.1
30°	6146.0	4922.8	2029.8	1228.0	1111.6	1084.9	1059.7	1036.1	1001.5	962.2	959.1
32.5°	6660.2	5133.5	1889.9	1182.4	1069.2	1040.8	1011.0	982.7	944.9	905.6	907.2
35°	7273.4	5388.2	1808.1	1150.9	1036.1	998.4	965.4	933.9	905.6	871.0	867.9
37.5°	7938.4	5658.6	1783.0	1135.2	1014.1	955.9	918.2	896.2	893.1	872.6	871.0
40°	8666.4	5979.4	1801.8	1125.8	990.5	915.1	874.2	869.5	877.3	841.2	842.7
42.5°	9436.8	6359.9	1833.3	1114.7	957.5	874.2	834.9	834.9	828.6	778.3	778.3
45°	10270.1	6798.5	1864.7	1088.0	918.2	833.3	803.4	792.4	765.7	717.0	715.4
47.5°	11109.7	7245.1	1888.3	1039.3	871.0	798.7	772.0	746.8	707.5	663.5	661.9
50°	11906.9	7646.0	1863.2	967.0	817.6	765.7	737.4	702.8	660.4	630.5	625.8
52.5°	12619.1	7993.5	1756.2	882.0	761.0	731.1	706.0	669.8	635.2	603.8	600.6
55°	13238.6	8274.9	1567.6	801.9	710.7	701.2	676.1	630.5	583.3	556.6	553.4
57.5°	13832.9	8488.7	1331.7	735.8	665.1	668.2	630.5	589.6	545.6	517.3	514.1
60°	14623.8	8774.9	1092.7	674.5	616.3	625.8	584.9	555.0	500.0	463.8	459.1
62.5°	15887.9	9219.9	867.9	599.0	559.7	562.9	545.6	509.4	443.4	400.9	397.8
65°	16891.0	9056.3	683.9	517.3	495.3	500.0	500.0	460.7	389.9	341.2	336.5
67.5°	16777.8	7754.5	545.6	437.1	433.9	437.1	448.1	415.1	345.9	306.6	300.3
70°	15455.5	6168.1	437.1	363.2	377.3	369.5	400.9	378.9	311.3	272.0	267.3
72.5°	12611.3	4443.3	333.3	300.3	289.3	301.9	361.6	341.2	259.4	215.4	210.7
75°	7369.3	2371.0	248.4	237.4	209.1	251.6	320.7	290.9	198.1	158.8	154.1
77.5°	2399.3	827.0	182.4	174.5	155.7	202.8	273.6	245.3	161.9	125.8	121.1
80°	643.1	250.0	124.2	114.8	100.6	150.9	217.0	195.0	116.3	81.8	80.2
82.5°	257.9	105.3	72.3	64.5	55.0	103.8	171.4	157.2	86.5	51.9	51.9
85°	83.3	34.6	26.7	20.4	25.2	64.5	102.2	106.9	61.3	26.7	20.4
87.5°	11.0	4.7	4.7	6.3	4.7	11.0	31.4	29.9	17.3	3.1	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)