

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: P884630

Luminaire Tested: **NAV-SB5C-740-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884630
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-740-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31021 lumens
Efficiency: N/A
Efficacy: 124.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G5

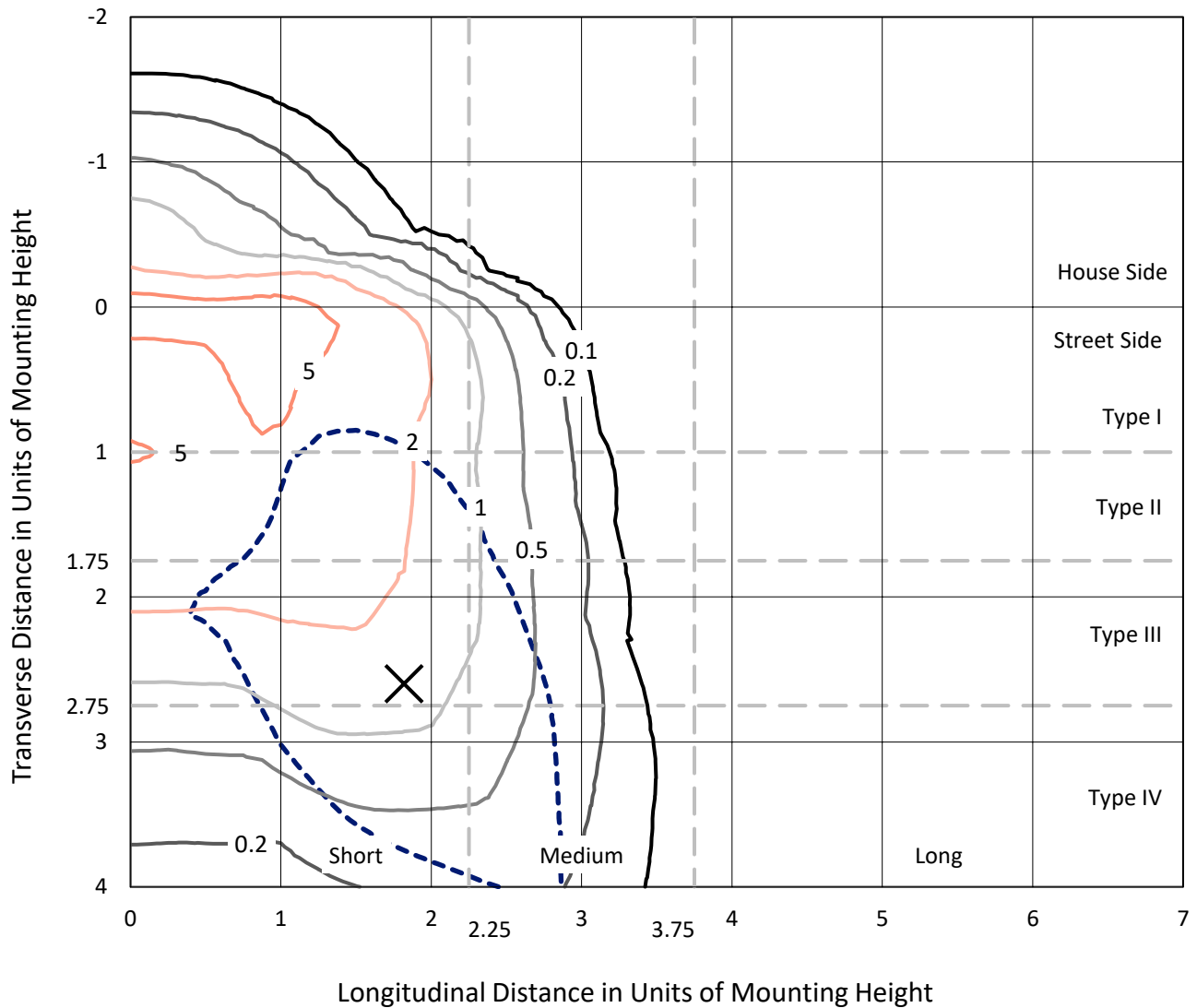
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

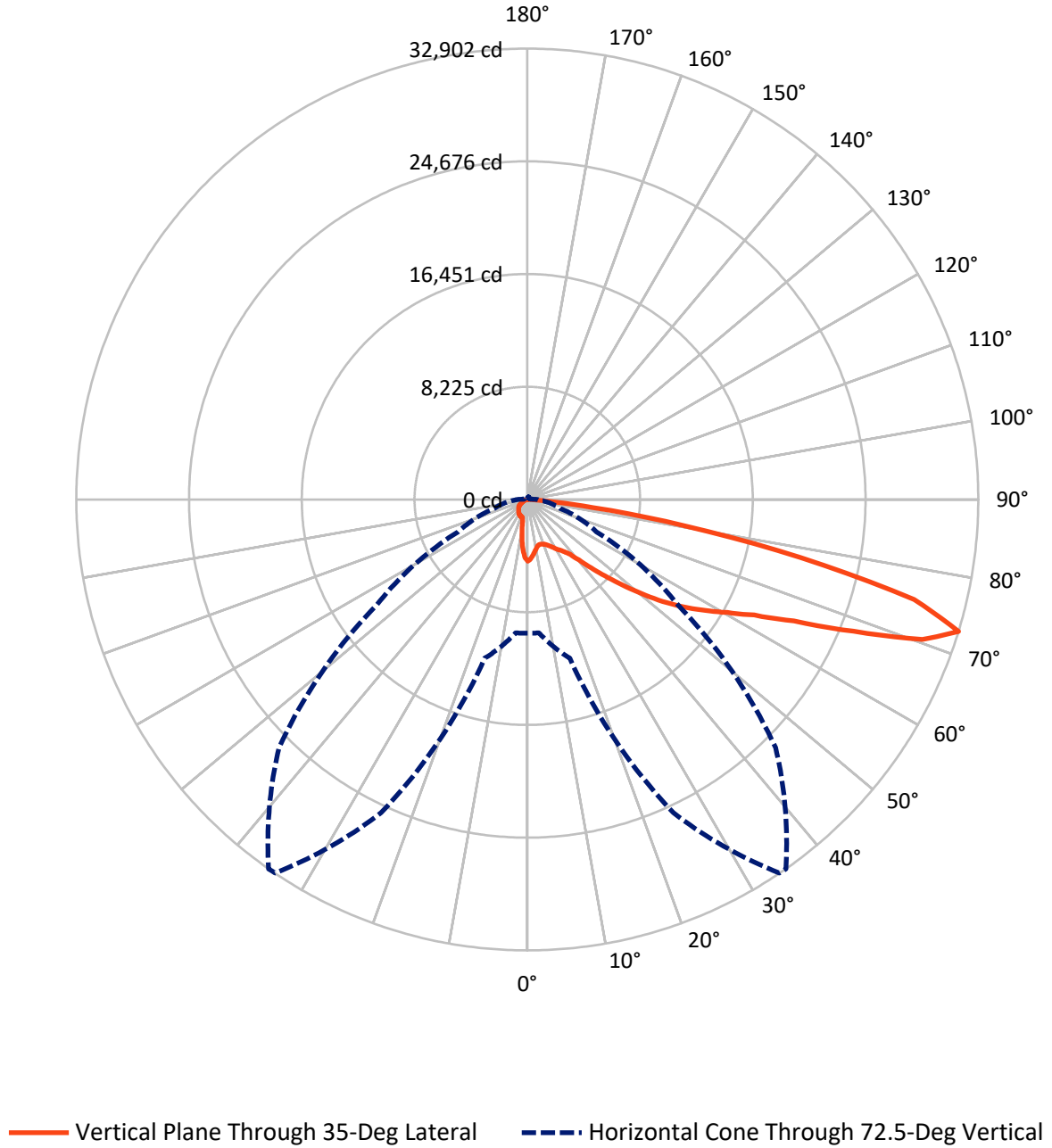
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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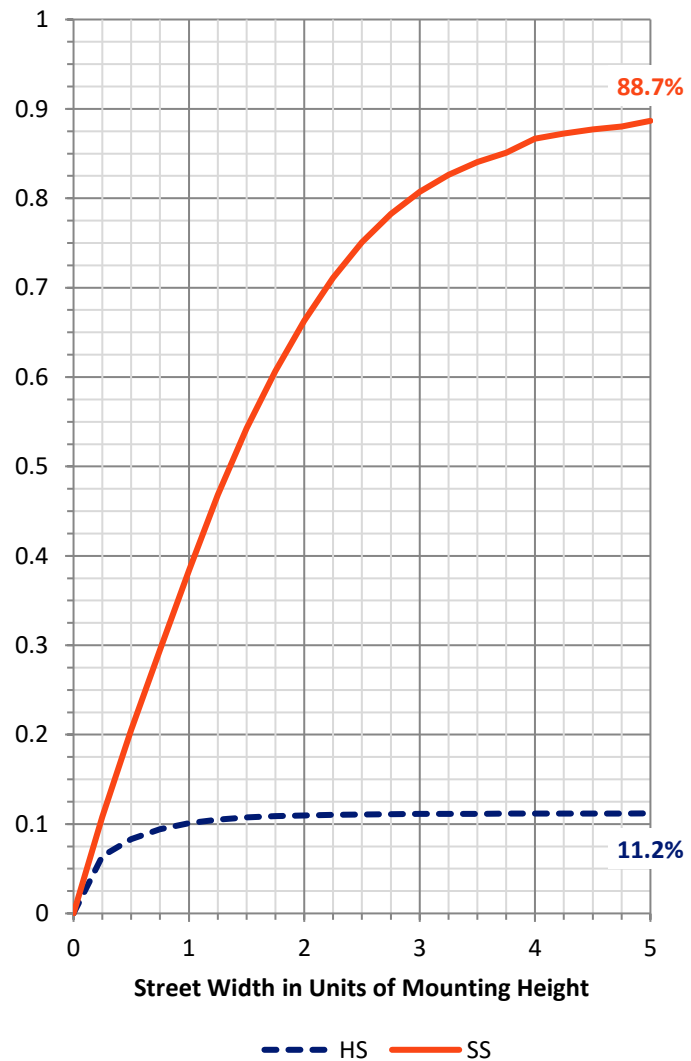
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3491.3	0.0	3491.3
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	27529.7	0.0	27529.7
	% Fixture	88.7	0.0	88.7
Total	Lumens	31021.0	0.0	31021.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	369.4	1.2
10°-20°	864.3	2.8
20°-30°	1404.0	4.5
30°-40°	2342.6	7.6
40°-50°	4432.2	14.3
50°-60°	7042.8	22.7
60°-70°	8712.4	28.1
70°-80°	5415.7	17.5
80°-90°	437.7	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°	31021.0	100.0
0°-180°	31021.0	100.0

Coefficient of Utilization



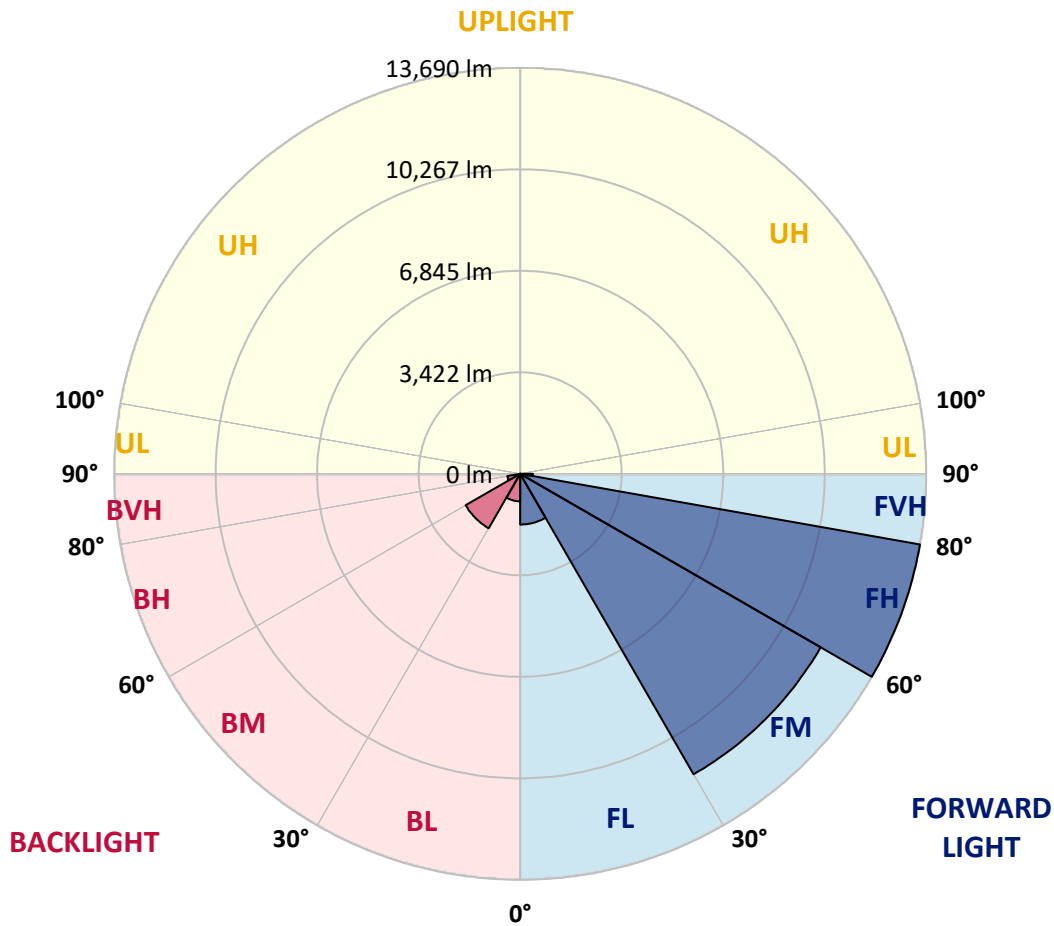
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1710.0	5.5			
FM (30°-60°)	11698.0	37.7			
FH (60°-80°)	13689.9	44.1			G5
FVH (80°-90°)	431.7	1.4			G3/500
BL (0°-30°)	927.7	3.0	B2/1000		
BM (30°-60°)	2119.5	6.8	B2/2500		
BH (60°-80°)	438.1	1.4	B1/500		G1/500
BVH (80°-90°)	6.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	4496.0	4496.0	4496.0	4496.0	4496.0	4496.0	4496.0	4496.0	4496.0	4496.0	4496.0
2.5°	4296.0	4332.3	4339.1	4350.5	4350.5	4364.1	4386.9	4418.7	4471.0	4498.3	4516.4
5°	3959.6	3986.8	4020.9	4048.2	4100.5	4107.3	4195.9	4282.3	4402.8	4493.7	4557.4
7.5°	3620.9	3652.7	3698.2	3764.1	3832.3	3852.7	3986.8	4132.3	4323.2	4493.7	4600.5
10°	3382.2	3384.5	3425.4	3491.3	3600.4	3625.4	3789.1	3995.9	4234.6	4466.4	4641.5
12.5°	3248.1	3264.0	3282.2	3332.2	3436.8	3452.7	3627.7	3870.9	4145.9	4450.5	4689.2
15°	3248.1	3259.5	3270.8	3295.8	3379.9	3393.6	3548.1	3791.4	4100.5	4457.3	4766.5
17.5°	3282.2	3300.4	3291.3	3320.8	3409.5	3418.6	3555.0	3768.6	4098.2	4500.5	4884.7
20°	3364.0	3377.7	3359.5	3377.7	3466.3	3484.5	3625.4	3811.8	4136.8	4575.5	5032.4
22.5°	3493.6	3500.4	3457.2	3470.9	3561.8	3584.5	3748.2	3934.6	4230.0	4696.0	5230.2
25°	3657.2	3670.9	3605.0	3620.9	3707.3	3734.5	3923.2	4118.7	4377.8	4861.9	5482.5
27.5°	3845.9	3852.7	3795.9	3793.6	3905.0	3943.6	4134.6	4346.0	4575.5	5071.1	5800.7
30°	4061.8	4082.3	4027.7	4018.7	4159.6	4191.4	4380.1	4625.5	4866.5	5384.7	6253.0
32.5°	4232.3	4248.2	4216.4	4239.1	4382.3	4407.3	4677.8	5021.0	5323.4	5830.2	6869.0
35°	4477.8	4486.9	4414.2	4455.1	4618.7	4682.4	5084.7	5575.7	5898.4	6389.4	7673.6
37.5°	5366.5	5366.5	5057.4	4855.1	5012.0	5068.8	5641.6	6273.5	6607.6	7139.5	8687.4
40°	6596.2	6575.8	6123.4	5709.8	5689.3	5800.7	6434.8	7153.1	7523.6	8039.6	9828.4
42.5°	7907.7	7875.9	7259.9	6850.8	6782.6	6821.3	7350.9	8237.3	8614.6	9137.4	11055.8
45°	9071.5	9062.4	8498.7	7948.7	7825.9	7948.7	8494.2	9505.7	9776.1	10326.2	12281.0
47.5°	10046.6	10046.6	9635.2	9276.1	9212.4	9285.2	10042.1	10912.6	10887.6	11592.3	13474.3
50°	11169.5	11160.4	10769.4	10614.9	10680.8	10783.1	11824.1	12394.6	12037.8	12835.6	14540.3
52.5°	11956.0	12010.5	11876.4	11851.4	12187.8	12365.1	13633.4	13844.8	13067.4	14015.3	15338.2
55°	12578.8	12642.4	12797.0	12972.0	13619.8	13851.6	15385.9	15220.0	13928.9	15038.1	15797.3
57.5°	13460.7	13369.8	13608.4	13953.9	15001.8	15281.3	17083.8	16517.9	14622.2	15867.8	15847.3
60°	14531.3	14544.9	14585.8	15022.2	16381.5	16740.6	18756.7	17745.3	15067.7	16376.9	15292.7
62.5°	15817.8	15838.2	15922.3	16592.9	18234.0	18572.6	20538.8	18749.9	15272.2	16233.7	13860.7
65°	15729.1	15815.5	16754.2	19047.7	21050.2	21384.3	22618.6	19454.6	14963.1	14924.5	11285.4
67.5°	14329.0	14469.9	16040.5	21979.9	25296.2	25668.9	25132.5	19593.2	13628.9	11605.9	7362.2
70°	12492.4	12542.4	14431.2	24616.5	30212.6	30590.0	27382.8	18068.0	10342.1	6473.5	3298.1
72.5°	9755.7	9767.1	11983.2	25228.0	32881.1	32901.6	25616.6	13412.9	5562.0	2486.7	1145.6
75°	6969.0	6900.8	8025.9	20459.2	28928.4	29160.2	19204.5	6291.6	2125.2	1175.1	570.5
77.5°	3736.8	3811.8	4541.4	12133.2	19984.2	20379.7	10478.5	1813.8	1081.9	800.1	377.3
80°	1154.7	1218.3	1861.6	5555.2	11319.5	11558.2	3884.5	806.9	754.6	570.5	247.8
82.5°	363.7	377.3	868.3	2334.4	4698.3	4807.4	1125.1	456.9	516.0	377.3	145.5
85°	104.6	106.8	386.4	870.6	1161.5	1184.2	315.9	177.3	295.5	234.1	75.0
87.5°	11.4	36.4	145.5	145.5	102.3	100.0	34.1	38.6	84.1	29.5	13.6
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4496.0	4496.0	4496.0	4496.0	4496.0	4496.0	4496.0	4496.0	4496.0	4496.0	4496.0
2.5°	4505.1	4507.3	4477.8	4427.8	4373.2	4327.8	4271.0	4225.5	4193.7	4184.6	4200.5
5°	4536.9	4521.0	4436.9	4284.6	4102.8	3945.9	3770.9	3632.2	3541.3	3502.7	3516.3
7.5°	4584.6	4539.2	4355.1	4055.0	3707.3	3398.1	3084.5	2841.2	2686.7	2609.4	2620.8
10°	4625.5	4534.6	4218.7	3723.2	3191.3	2723.0	2300.3	2007.1	1843.4	1766.1	1768.4
12.5°	4664.2	4532.4	4041.4	3329.9	2609.4	2036.6	1643.4	1497.9	1452.4	1436.5	1432.0
15°	4736.9	4539.2	3818.6	2879.9	2029.8	1538.8	1395.6	1393.3	1402.4	1397.9	1395.6
17.5°	4836.9	4546.0	3566.3	2402.6	1566.1	1357.0	1350.2	1370.6	1384.3	1377.4	1375.2
20°	4966.5	4573.3	3298.1	1929.8	1345.6	1311.5	1327.4	1345.6	1357.0	1345.6	1343.3
22.5°	5148.3	4621.0	3004.9	1550.2	1275.1	1284.2	1297.9	1318.3	1329.7	1313.8	1311.5
25°	5371.1	4696.0	2716.2	1347.9	1241.1	1252.4	1272.9	1295.6	1309.2	1293.3	1291.1
27.5°	5659.8	4816.5	2450.3	1302.4	1207.0	1213.8	1243.3	1277.4	1295.6	1275.1	1275.1
30°	6078.0	5014.2	2220.7	1322.9	1186.5	1170.6	1211.5	1259.2	1279.7	1261.5	1259.2
32.5°	6632.6	5293.8	2079.8	1354.7	1177.4	1120.6	1159.2	1220.6	1254.7	1243.3	1243.3
35°	7360.0	5718.9	2025.2	1391.1	1170.6	1068.3	1095.6	1161.5	1220.6	1232.0	1232.0
37.5°	8241.9	6309.8	2041.1	1407.0	1150.1	1025.1	1038.8	1095.6	1172.9	1209.2	1218.3
40°	9244.3	6998.5	2132.1	1391.1	1127.4	988.8	991.0	1034.2	1102.4	1157.0	1175.1
42.5°	10278.5	7803.2	2300.3	1332.0	1106.9	956.9	950.1	979.7	1025.1	1063.8	1079.7
45°	11262.7	8630.6	2466.2	1250.1	1081.9	925.1	909.2	920.6	929.7	945.6	954.7
47.5°	12121.9	9212.4	2418.5	1175.1	1047.9	888.7	861.5	856.9	829.6	827.4	825.1
50°	12715.1	9339.7	2148.0	1100.1	997.8	847.8	804.6	777.4	729.6	706.9	709.2
52.5°	12903.8	8837.4	1754.8	1025.1	916.0	793.3	731.9	688.7	629.6	609.2	606.9
55°	12653.8	7853.2	1402.4	934.2	802.4	720.5	652.3	595.5	547.8	522.8	522.8
57.5°	12042.3	6600.8	1109.2	827.4	681.9	638.7	570.5	513.7	472.8	447.8	443.2
60°	11028.6	5241.5	877.4	700.1	581.9	550.1	479.6	443.2	406.9	377.3	370.5
62.5°	9489.8	3741.3	688.7	554.6	486.4	450.1	409.1	381.9	338.7	297.8	290.9
65°	7405.4	2288.9	531.9	406.9	391.0	372.8	347.8	322.8	270.5	229.6	222.8
67.5°	4671.0	1084.2	379.6	306.9	309.1	300.0	288.7	268.2	229.6	193.2	188.7
70°	2057.1	525.1	250.0	234.1	229.6	229.6	238.7	231.8	195.5	161.4	154.6
72.5°	700.1	281.9	186.4	177.3	165.9	163.7	200.0	193.2	156.8	125.0	118.2
75°	366.0	188.7	136.4	127.3	100.0	120.5	159.1	150.0	111.4	81.8	75.0
77.5°	238.7	134.1	93.2	81.8	56.8	79.6	118.2	104.6	65.9	40.9	36.4
80°	150.0	88.6	54.6	38.6	27.3	43.2	63.6	45.5	25.0	9.1	6.8
82.5°	79.6	45.5	20.5	13.6	11.4	13.6	15.9	11.4	4.5	0.0	0.0
85°	31.8	15.9	6.8	4.5	2.3	0.0	4.5	2.3	0.0	0.0	0.0
87.5°	11.4	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)