

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: P884628

Luminaire Tested: **NAV-SB5C-740-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884628
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-740-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32133 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

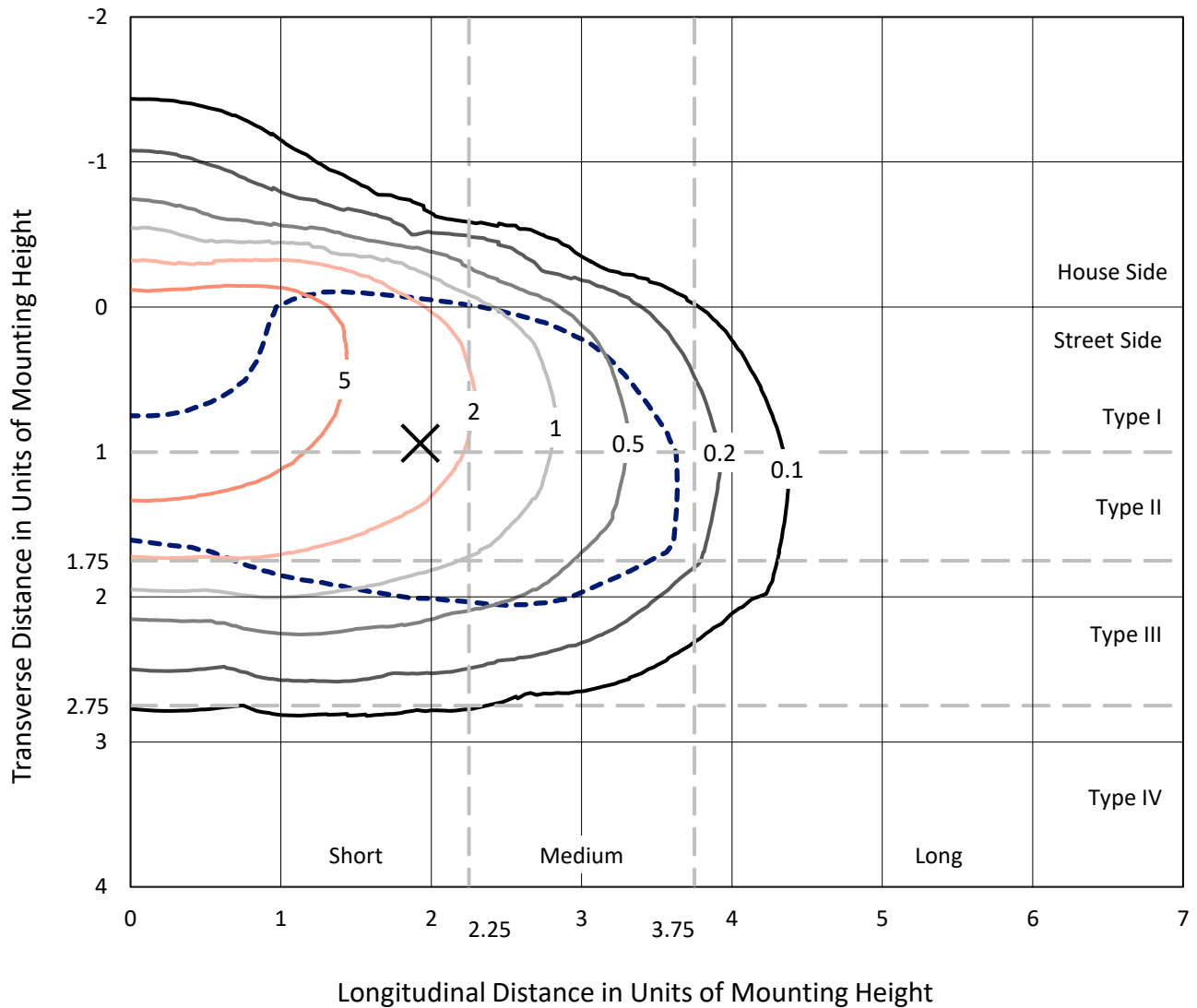
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P884628
 CATALOG NUMBER: NAV-SB5C-740-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

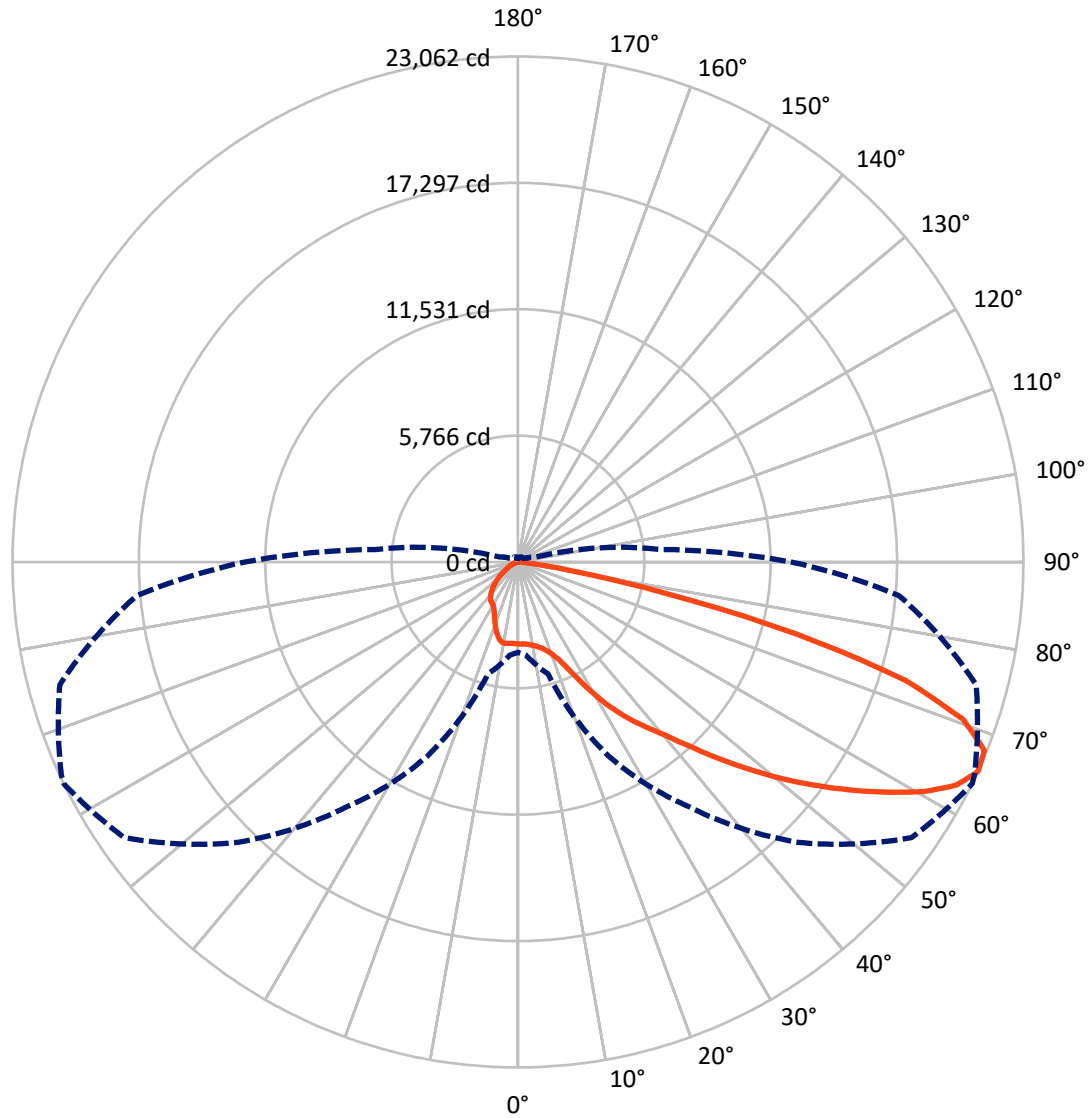
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.4 fc
 Type III - Short - N/A

REPORT NUMBER: P884628
CATALOG NUMBER: NAV-SB5C-740-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P884628

CATALOG NUMBER: NAV-SB5C-740-U-T3-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4297.2	0.0	4297.2
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	27835.8	0.0	27835.8
	% Fixture	86.6	0.0	86.6
Total	Lumens	32133.0	0.0	32133.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	344.8	1.1
10°-20°	935.2	2.9
20°-30°	1772.2	5.5
30°-40°	3586.1	11.2
40°-50°	6108.9	19.0
50°-60°	8307.6	25.9
60°-70°	7801.3	24.3
70°-80°	3125.5	9.7
80°-90°	151.4	0.5
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°	32133.0	100.0
0°-180°	32133.0	100.0

Coefficient of Utilization



REPORT NUMBER: P884628

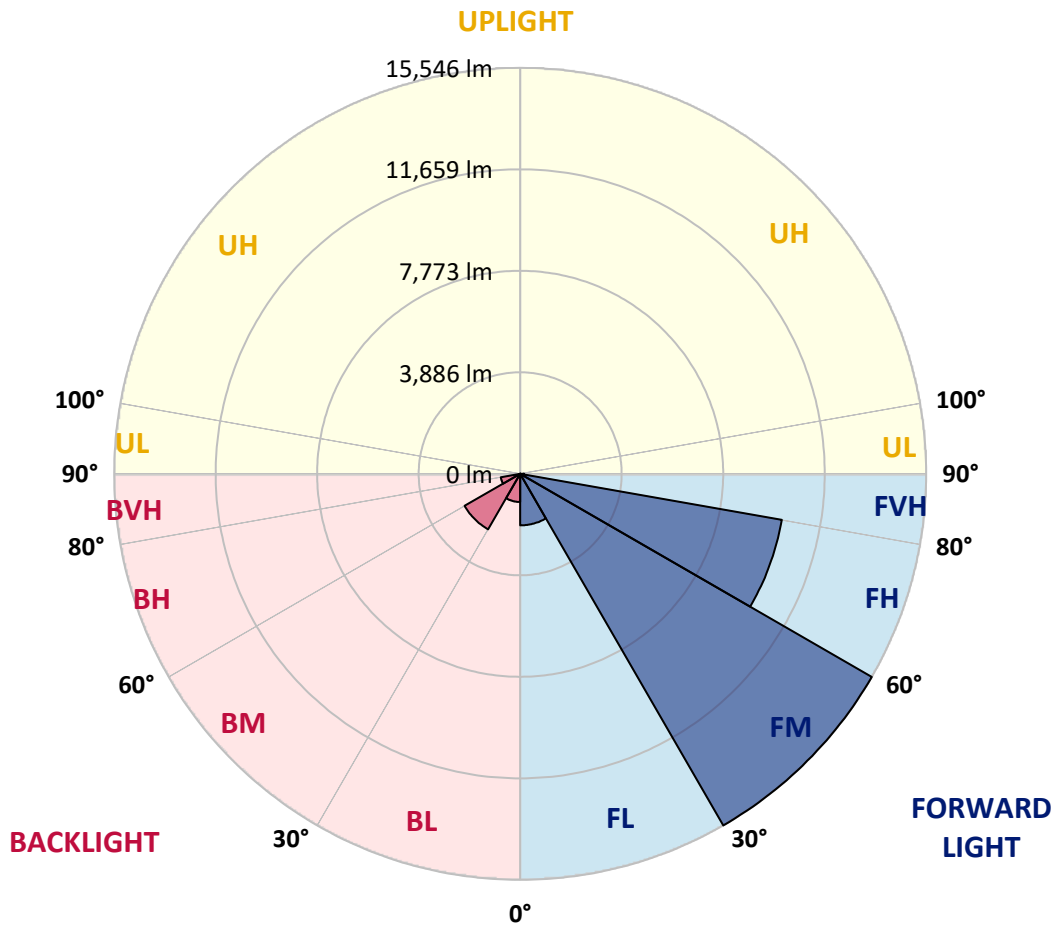
CATALOG NUMBER: NAV-SB5C-740-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1973.3	6.1			
FM (30°-60°)	15545.9	48.4			
FH (60°-80°)	10172.6	31.7			G4/12000
FVH (80°-90°)	144.0	0.4			G2/225
BL (0°-30°)	1078.9	3.4	B3/2500		
BM (30°-60°)	2456.7	7.6	B2/2500		
BH (60°-80°)	754.2	2.3	B2/1000		G2/1000
BVH (80°-90°)	7.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short



REPORT NUMBER: P884628

CATALOG NUMBER: NAV-SB5C-740-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	3737.4	3737.4	3737.4	3737.4	3737.4	3737.4	3737.4	3737.4	3737.4	3737.4	3737.4
2.5°	3724.5	3750.3	3743.9	3737.4	3735.2	3739.6	3741.7	3739.6	3739.6	3739.6	3741.7
5°	3653.4	3674.9	3674.9	3690.0	3711.6	3737.4	3756.8	3761.1	3765.4	3771.9	3769.7
7.5°	3517.7	3534.9	3547.8	3597.4	3651.2	3720.2	3778.3	3808.5	3812.8	3836.5	3845.1
10°	3425.1	3446.6	3468.1	3519.8	3597.4	3700.8	3799.9	3873.1	3883.9	3939.9	3965.7
12.5°	3420.7	3442.3	3470.3	3526.3	3616.8	3726.6	3847.3	3952.8	3972.2	4054.1	4107.9
15°	3466.0	3491.8	3517.7	3586.6	3683.5	3817.1	3946.4	4077.8	4097.1	4213.5	4271.6
17.5°	3558.6	3593.1	3612.5	3681.4	3784.8	3933.4	4103.6	4254.4	4271.6	4407.3	4480.6
20°	3741.7	3782.6	3789.1	3845.1	3946.4	4105.8	4308.2	4495.7	4517.2	4672.3	4754.1
22.5°	4120.8	4179.0	4127.3	4155.3	4245.8	4405.2	4624.9	4861.9	4892.0	5068.6	5141.9
25°	4788.6	4870.5	4736.9	4689.5	4728.3	4894.2	5169.9	5469.3	5503.8	5646.0	5682.6
27.5°	6100.5	5994.9	5792.4	5594.3	5477.9	5572.7	5882.9	6253.4	6296.5	6434.4	6391.3
30°	7541.6	7449.0	7175.4	6735.9	6460.2	6445.1	6731.6	7145.2	7194.8	7326.2	7194.8
32.5°	8984.8	8896.5	8599.3	8058.6	7580.4	7343.4	7541.6	8000.4	8026.3	8110.3	7916.4
35°	10404.4	10313.9	10016.7	9463.1	8875.0	8336.5	8297.7	8814.7	8823.3	8911.6	8623.0
37.5°	11832.6	11757.2	11440.5	10897.7	10318.2	9575.1	9215.3	9585.8	9596.6	9682.8	9383.4
40°	12851.5	12883.8	12666.2	12246.2	11748.6	10936.5	10245.0	10406.6	10341.9	10486.3	10307.5
42.5°	13726.1	13790.7	13601.1	13390.0	13101.4	12386.2	11520.2	11492.2	11388.8	11466.4	11281.1
45°	14482.2	14536.0	14365.8	14316.3	14309.8	13807.9	12914.0	12745.9	12601.6	12586.5	12364.7
47.5°	14760.0	14863.4	14936.7	15102.5	15425.7	15214.6	14355.1	14094.4	13932.9	13814.4	13463.3
50°	14865.6	14975.5	15225.3	15707.9	16472.6	16563.0	15789.7	15496.8	15298.6	15083.2	14566.2
52.5°	14723.4	14919.4	15255.5	16067.6	17177.0	17644.4	17166.2	16909.9	16683.7	16332.6	15565.7
55°	13885.5	14081.5	14768.7	16063.3	17528.1	18402.7	18467.3	18353.1	18098.9	17545.3	16373.5
57.5°	12119.1	12409.9	13497.7	15516.1	17521.6	19055.4	19742.5	19824.4	19540.0	18747.3	17008.9
60°	9672.0	10066.2	11393.2	14303.4	16980.9	19408.6	20860.5	21269.8	20968.2	19932.1	17523.8
62.5°	6748.9	7205.5	8461.4	12403.4	15744.5	19154.5	21676.9	22433.0	22204.7	20991.9	17722.0
65°	4116.5	4263.0	5275.4	9760.3	13642.1	18090.3	21929.0	23062.0	22986.6	21640.3	17429.0
67.5°	2742.2	2865.0	3155.8	6692.9	10589.7	15964.2	21325.8	22952.2	22973.7	21534.8	16356.2
70°	1652.2	1757.8	1947.3	3892.5	6863.0	12636.1	19458.2	21552.0	21676.9	20123.8	14322.8
72.5°	680.7	751.8	924.1	1764.2	3554.3	8019.8	15494.6	18503.9	18794.7	16920.6	10992.5
75°	385.6	422.2	542.8	885.3	1542.4	3737.4	9385.5	13135.8	13564.5	11662.4	6613.2
77.5°	256.3	273.6	351.1	573.0	868.1	1275.2	4011.0	6843.6	7662.2	6369.7	2862.8
80°	172.3	187.4	241.3	383.4	564.4	547.1	1277.4	2535.4	3119.2	2188.6	697.9
82.5°	116.3	118.5	172.3	252.0	357.6	265.0	377.0	788.4	990.9	633.3	265.0
85°	66.8	64.6	127.1	146.5	159.4	109.9	114.2	237.0	310.2	267.1	150.8
87.5°	8.6	12.9	49.5	38.8	21.5	23.7	23.7	40.9	60.3	64.6	32.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P884628

CATALOG NUMBER: NAV-SB5C-740-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3737.4	3737.4	3737.4	3737.4	3737.4	3737.4	3737.4	3737.4	3737.4	3737.4	3737.4
2.5°	3741.7	3739.6	3733.1	3726.6	3711.6	3702.9	3707.2	3702.9	3700.8	3702.9	3711.6
5°	3769.7	3763.3	3746.0	3724.5	3694.3	3657.7	3634.0	3599.5	3567.2	3547.8	3552.1
7.5°	3845.1	3838.6	3814.9	3754.6	3657.7	3504.8	3364.7	3242.0	3149.3	3095.5	3097.6
10°	3965.7	3955.0	3918.3	3784.8	3530.6	3196.7	2918.8	2688.3	2537.6	2466.5	2460.0
12.5°	4107.9	4095.0	4030.4	3756.8	3289.3	2768.0	2384.6	2128.3	1988.3	1925.8	1919.3
15°	4275.9	4258.7	4131.6	3623.2	2938.2	2294.1	1943.0	1751.3	1660.8	1604.8	1607.0
17.5°	4484.9	4454.7	4207.0	3422.9	2556.9	1932.2	1671.6	1527.3	1447.6	1393.7	1389.4
20°	4756.3	4706.8	4267.3	3183.8	2205.8	1703.9	1488.5	1367.9	1307.6	1260.2	1251.5
22.5°	5135.4	5064.3	4340.6	2925.3	1958.1	1546.7	1352.8	1264.5	1214.9	1161.1	1152.5
25°	5605.0	5521.0	4431.0	2686.2	1787.9	1410.9	1253.7	1180.5	1122.3	1059.8	1053.4
27.5°	6262.0	6111.2	4538.7	2490.2	1641.4	1294.6	1163.2	1081.4	1014.6	962.9	952.1
30°	6994.4	6746.7	4633.5	2371.7	1507.9	1186.9	1044.7	962.9	900.4	863.8	857.3
32.5°	7688.1	7352.0	4696.0	2320.0	1387.3	1064.1	915.5	827.2	779.8	769.0	775.5
35°	8342.9	7899.2	4689.5	2270.4	1279.5	941.4	788.4	697.9	661.3	667.8	667.8
37.5°	9096.9	8482.9	4644.3	2192.9	1191.2	829.3	678.5	598.8	566.5	568.7	577.3
40°	9973.6	9157.2	4616.3	2046.4	1094.3	725.9	588.1	523.5	499.8	491.1	489.0
42.5°	10908.5	9809.9	4620.6	1880.5	973.7	633.3	525.6	471.8	450.2	443.7	441.6
45°	11847.7	10432.4	4627.1	1708.2	846.6	562.2	480.4	435.1	422.2	413.6	413.6
47.5°	12730.9	10962.3	4506.4	1523.0	721.6	508.4	443.7	413.6	402.8	392.1	392.1
50°	13553.7	11315.6	4215.6	1307.6	622.5	465.3	415.7	394.2	383.4	372.7	372.7
52.5°	14193.5	11371.6	3735.2	1085.7	553.6	433.0	398.5	379.1	366.2	355.4	353.3
55°	14477.9	11020.5	3052.4	878.9	499.8	405.0	381.3	361.9	346.8	336.0	333.9
57.5°	14404.6	10281.6	2380.3	706.6	448.1	377.0	359.7	346.8	329.6	312.3	310.2
60°	14044.9	9292.9	1794.4	588.1	400.7	346.8	336.0	325.3	301.6	275.7	271.4
62.5°	13422.3	8050.0	1279.5	486.8	349.0	312.3	308.0	299.4	265.0	217.6	213.3
65°	12470.2	6539.9	861.6	405.0	299.4	273.6	275.7	260.6	215.4	161.6	157.3
67.5°	11078.6	4782.2	551.5	331.7	249.9	228.3	230.5	221.9	183.1	137.9	131.4
70°	9305.8	3166.6	359.7	252.0	200.3	176.6	189.6	191.7	155.1	112.0	107.7
72.5°	6822.1	1869.8	252.0	187.4	146.5	122.8	155.1	159.4	124.9	84.0	79.7
75°	3888.2	887.5	189.6	135.7	90.5	86.2	120.6	120.6	86.2	56.0	51.7
77.5°	1632.8	370.5	133.6	88.3	51.7	49.5	81.9	75.4	43.1	25.8	25.8
80°	471.8	165.9	71.1	43.1	21.5	19.4	32.3	23.7	10.8	4.3	4.3
82.5°	185.3	73.2	28.0	17.2	8.6	8.6	4.3	0.0	0.0	0.0	0.0
85°	109.9	30.2	12.9	6.5	2.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	28.0	6.5	4.3	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)