

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: P969223

Luminaire Tested: **NAV-SB5D-722-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969223
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-722-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34135.6 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

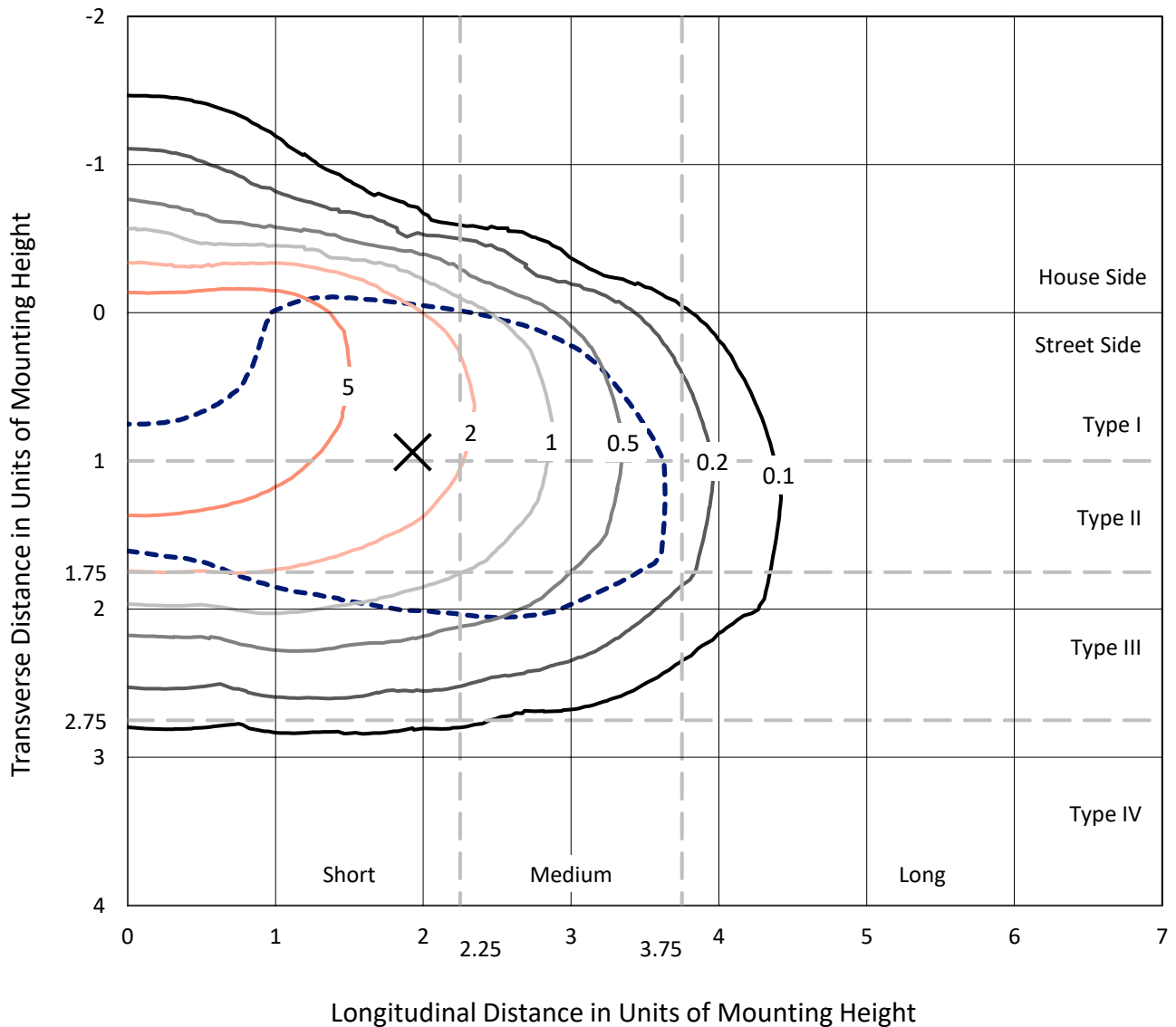
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

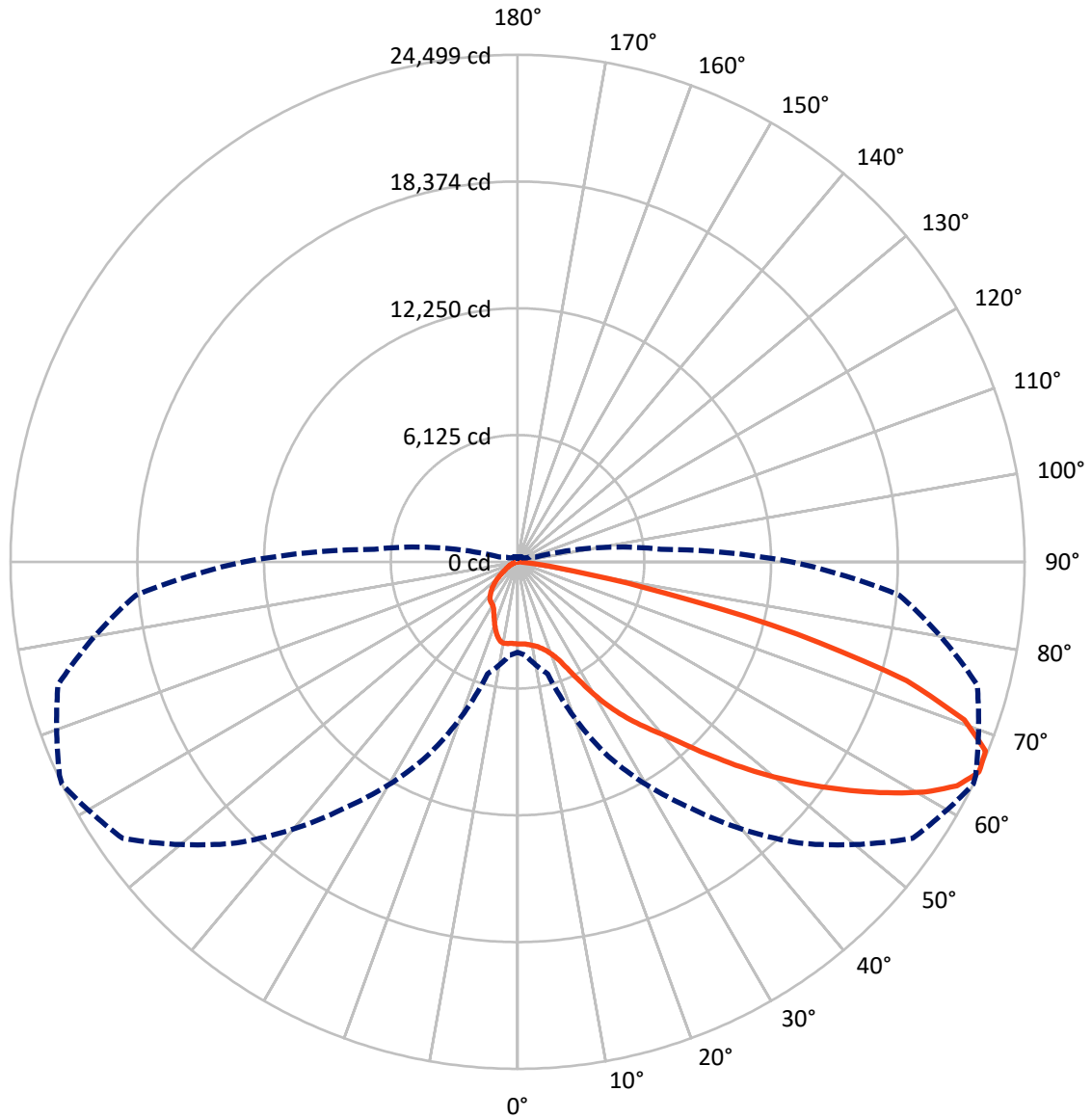
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10 fc
 Type III - Short - N/A

REPORT NUMBER: P969223
CATALOG NUMBER: NAV-SB5D-722-U-T3-HSS

Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4565.0	0.0	4565.0
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	29570.6	0.0	29570.6
	% Fixture	86.6	0.0	86.6
Total	Lumens	34135.6	0.0	34135.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	366.3	1.1
10°-20°	993.5	2.9
20°-30°	1882.6	5.5
30°-40°	3809.5	11.2
40°-50°	6489.6	19.0
50°-60°	8825.4	25.9
60°-70°	8287.5	24.3
70°-80°	3320.3	9.7
80°-90°	160.9	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°	34135.6	100.0
0°-180°	34135.6	100.0

Coefficient of Utilization



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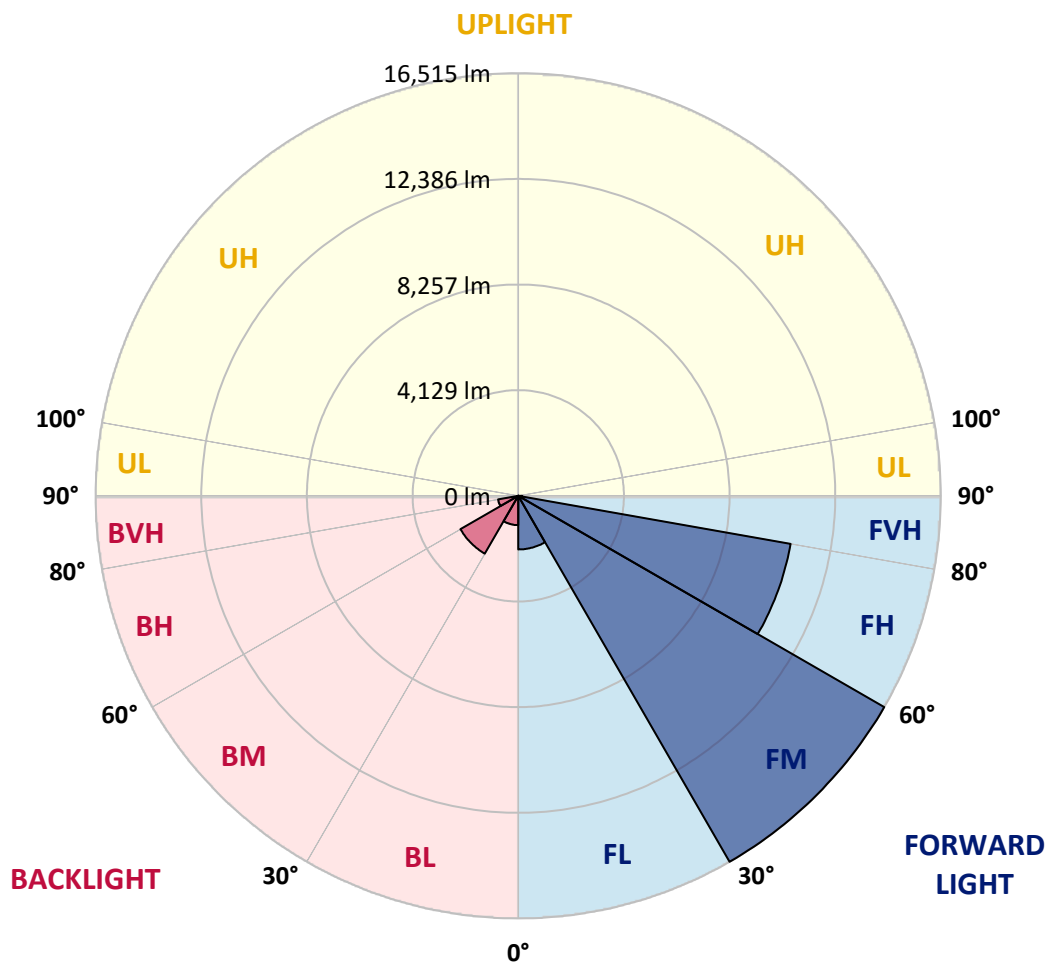
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2096.3	6.1			
FM (30°-60°)	16514.7	48.4			
FH (60°-80°)	10806.5	31.7			G4/12000
FVH (80°-90°)	153.0	0.4			G2/225
BL (0°-30°)	1146.1	3.4	B3/2500		
BM (30°-60°)	2609.8	7.6	B3/5000		
BH (60°-80°)	801.2	2.3	B2/1000		G2/1000
BVH (80°-90°)	7.9	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: P969223
 CATALOG NUMBER: NAV-SB5D-722-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	3970.3	3970.3	3970.3	3970.3	3970.3	3970.3	3970.3	3970.3	3970.3	3970.3	3970.3
2.5°	3956.6	3984.1	3977.2	3970.3	3968.1	3972.6	3974.8	3972.6	3972.6	3972.6	3974.8
5°	3881.1	3903.9	3903.9	3920.0	3942.9	3970.3	3990.9	3995.4	4000.1	4006.9	4004.7
7.5°	3736.9	3755.2	3768.9	3821.6	3878.8	3952.0	4013.8	4045.9	4050.4	4075.6	4084.7
10°	3638.5	3661.4	3684.3	3739.2	3821.6	3931.4	4036.7	4114.5	4125.9	4185.4	4212.9
12.5°	3633.9	3656.8	3686.5	3746.1	3842.2	3958.9	4087.0	4199.1	4219.7	4306.7	4363.9
15°	3682.0	3709.5	3736.9	3810.1	3913.1	4055.0	4192.2	4331.9	4352.5	4476.1	4537.9
17.5°	3780.4	3817.0	3837.6	3910.8	4020.7	4178.5	4359.3	4519.5	4537.9	4682.0	4759.8
20°	3974.8	4018.4	4025.3	4084.7	4192.2	4361.7	4576.7	4775.8	4798.7	4963.5	5050.5
22.5°	4377.7	4439.5	4384.5	4414.3	4510.4	4679.7	4913.1	5164.9	5196.9	5384.5	5462.3
25°	5087.1	5174.0	5032.1	4981.8	5023.0	5199.2	5492.1	5810.2	5846.8	5997.8	6036.7
27.5°	6480.7	6368.5	6153.4	5942.8	5819.3	5920.0	6249.5	6643.1	6688.9	6835.3	6789.6
30°	8011.6	7913.2	7622.5	7155.7	6862.8	6846.8	7151.1	7590.5	7643.1	7782.7	7643.1
32.5°	9544.8	9451.0	9135.2	8560.8	8052.8	7801.1	8011.6	8499.0	8526.5	8615.7	8409.7
35°	11052.8	10956.7	10640.9	10052.8	9428.1	8856.0	8814.8	9364.0	9373.1	9467.0	9160.3
37.5°	12570.0	12489.9	12153.5	11576.9	10961.2	10171.8	9789.7	10183.3	10194.6	10286.2	9968.1
40°	13652.4	13686.7	13455.6	13009.4	12480.8	11618.1	10883.4	11055.1	10986.5	11139.8	10949.9
42.5°	14581.4	14650.1	14448.8	14224.5	13917.9	13158.1	12238.2	12208.5	12098.6	12181.0	11984.2
45°	15384.7	15441.9	15261.1	15208.5	15201.7	14668.5	13718.8	13540.2	13387.0	13370.9	13135.3
47.5°	15679.9	15789.7	15867.5	16043.8	16387.0	16162.7	15249.7	14972.8	14801.2	14675.3	14302.3
50°	15792.1	15908.7	16174.2	16686.8	17499.2	17595.3	16773.7	16462.5	16252.0	16023.2	15473.9
52.5°	15641.0	15849.3	16206.3	17068.9	18247.5	18744.1	18236.0	17963.7	17723.4	17350.4	16535.7
55°	14750.9	14959.1	15689.1	17064.4	18620.5	19549.5	19618.2	19496.9	19226.8	18638.8	17393.9
57.5°	12874.4	13183.3	14338.9	16483.1	18613.6	20242.9	20972.9	21059.9	20757.8	19915.6	18069.0
60°	10274.8	10693.5	12103.2	15194.8	18039.2	20618.2	22160.6	22595.4	22275.0	21174.2	18615.8
62.5°	7169.5	7654.6	8988.7	13176.5	16725.7	20348.2	23027.9	23831.0	23588.5	22300.2	18826.4
65°	4373.1	4528.7	5604.2	10368.6	14492.3	19217.7	23295.6	24499.2	24419.2	22989.0	18515.2
67.5°	2913.0	3043.5	3352.5	7110.0	11249.6	16959.1	22654.9	24382.6	24405.5	22876.9	17375.6
70°	1755.2	1867.3	2068.7	4135.1	7290.7	13423.6	20670.9	22895.1	23027.9	21377.9	15215.4
72.5°	723.1	798.7	981.7	1874.2	3775.8	8519.6	16460.3	19657.1	19966.1	17975.1	11677.5
75°	409.6	448.5	576.7	940.5	1638.5	3970.3	9970.4	13954.5	14409.9	12389.3	7025.2
77.5°	272.3	290.6	373.0	608.7	922.2	1354.7	4260.9	7270.1	8139.7	6766.7	3041.3
80°	183.1	199.1	256.2	407.3	599.5	581.3	1357.0	2693.4	3313.5	2325.0	741.4
82.5°	123.6	125.9	183.1	267.7	379.9	281.5	400.5	837.5	1052.7	672.8	281.5
85°	70.9	68.7	135.0	155.6	169.3	116.7	121.3	251.7	329.5	283.7	160.2
87.5°	9.1	13.7	52.6	41.2	22.9	25.2	25.2	43.5	64.1	68.7	34.3
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: P969223
 CATALOG NUMBER: NAV-SB5D-722-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3970.3	3970.3	3970.3	3970.3	3970.3	3970.3	3970.3	3970.3	3970.3	3970.3	3970.3
2.5°	3974.8	3972.6	3965.7	3958.9	3942.9	3933.7	3938.3	3933.7	3931.4	3933.7	3942.9
5°	4004.7	3997.8	3979.5	3956.6	3924.5	3885.7	3860.5	3823.9	3789.5	3768.9	3773.5
7.5°	4084.7	4077.9	4052.7	3988.6	3885.7	3723.2	3574.5	3444.0	3345.6	3288.4	3290.7
10°	4212.9	4201.5	4162.5	4020.7	3750.7	3395.9	3100.7	2855.9	2695.7	2620.2	2613.3
12.5°	4363.9	4350.2	4281.5	3990.9	3494.3	2940.5	2533.2	2260.9	2112.1	2045.8	2038.9
15°	4542.4	4524.1	4389.0	3849.1	3121.3	2437.1	2064.1	1860.5	1764.3	1704.9	1707.1
17.5°	4764.4	4732.3	4469.2	3636.2	2716.2	2052.7	1775.8	1622.5	1537.8	1480.6	1476.0
20°	5052.7	5000.1	4533.3	3382.2	2343.3	1810.2	1581.3	1453.1	1389.1	1338.6	1329.5
22.5°	5455.5	5379.9	4611.1	3107.6	2080.1	1643.1	1437.0	1343.3	1290.7	1233.4	1224.3
25°	5954.3	5865.0	4707.2	2853.6	1899.3	1498.9	1331.8	1254.0	1192.3	1125.9	1119.0
27.5°	6652.2	6492.1	4821.6	2645.3	1743.7	1375.3	1235.7	1148.7	1077.8	1023.0	1011.5
30°	7430.3	7167.2	4922.3	2519.4	1601.9	1260.9	1109.9	1023.0	956.5	917.7	910.8
32.5°	8167.2	7810.2	4988.7	2464.6	1473.7	1130.5	972.5	878.7	828.4	816.9	823.8
35°	8862.9	8391.5	4981.8	2411.9	1359.3	1000.0	837.5	741.4	702.5	709.4	709.4
37.5°	9663.8	9011.6	4933.7	2329.5	1265.5	881.0	720.9	636.2	601.9	604.1	613.3
40°	10595.1	9727.9	4904.0	2173.9	1162.5	771.2	624.7	556.1	530.9	521.7	519.5
42.5°	11588.3	10421.3	4908.5	1997.7	1034.3	672.8	558.3	501.1	478.3	471.4	469.1
45°	12586.1	11082.6	4915.4	1814.7	899.3	597.3	510.3	462.3	448.5	439.4	439.4
47.5°	13524.3	11645.5	4787.3	1617.9	766.6	540.1	471.4	439.4	427.9	416.5	416.5
50°	14398.4	12020.8	4478.3	1389.1	661.3	494.3	441.7	418.8	407.3	395.9	395.9
52.5°	15078.1	12080.3	3968.1	1153.3	588.1	459.9	423.3	402.7	389.0	377.6	375.3
55°	15380.1	11707.3	3242.6	933.7	530.9	430.2	405.1	384.5	368.4	357.0	354.6
57.5°	15302.3	10922.4	2528.7	750.6	476.0	400.5	382.1	368.4	350.1	331.8	329.5
60°	14920.2	9872.0	1906.2	624.7	425.7	368.4	357.0	345.5	320.4	292.9	288.3
62.5°	14258.9	8551.7	1359.3	517.2	370.7	331.8	327.3	318.1	281.5	231.1	226.5
65°	13247.4	6947.4	915.3	430.2	318.1	290.6	292.9	276.9	228.9	171.6	167.1
67.5°	11769.0	5080.2	585.8	352.4	265.5	242.6	244.9	235.7	194.5	146.5	139.6
70°	9885.7	3363.9	382.1	267.7	212.8	187.7	201.4	203.7	164.7	119.0	114.4
72.5°	7247.3	1986.3	267.7	199.1	155.6	130.5	164.7	169.3	132.7	89.3	84.7
75°	4130.5	942.8	201.4	144.2	96.1	91.5	128.1	128.1	91.5	59.4	54.9
77.5°	1734.6	393.6	141.9	93.8	54.9	52.6	86.9	80.1	45.8	27.5	27.5
80°	501.1	176.2	75.5	45.8	22.9	20.6	34.3	25.2	11.5	4.6	4.6
82.5°	196.8	77.8	29.7	18.3	9.1	9.1	4.6	0.0	0.0	0.0	0.0
85°	116.7	32.1	13.7	6.9	2.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	29.7	6.9	4.6	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)