

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: P969224

Luminaire Tested: **NAV-SB5D-722-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969224
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-722-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36236.8 lumens
Efficiency: N/A
Efficacy: 99.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G5

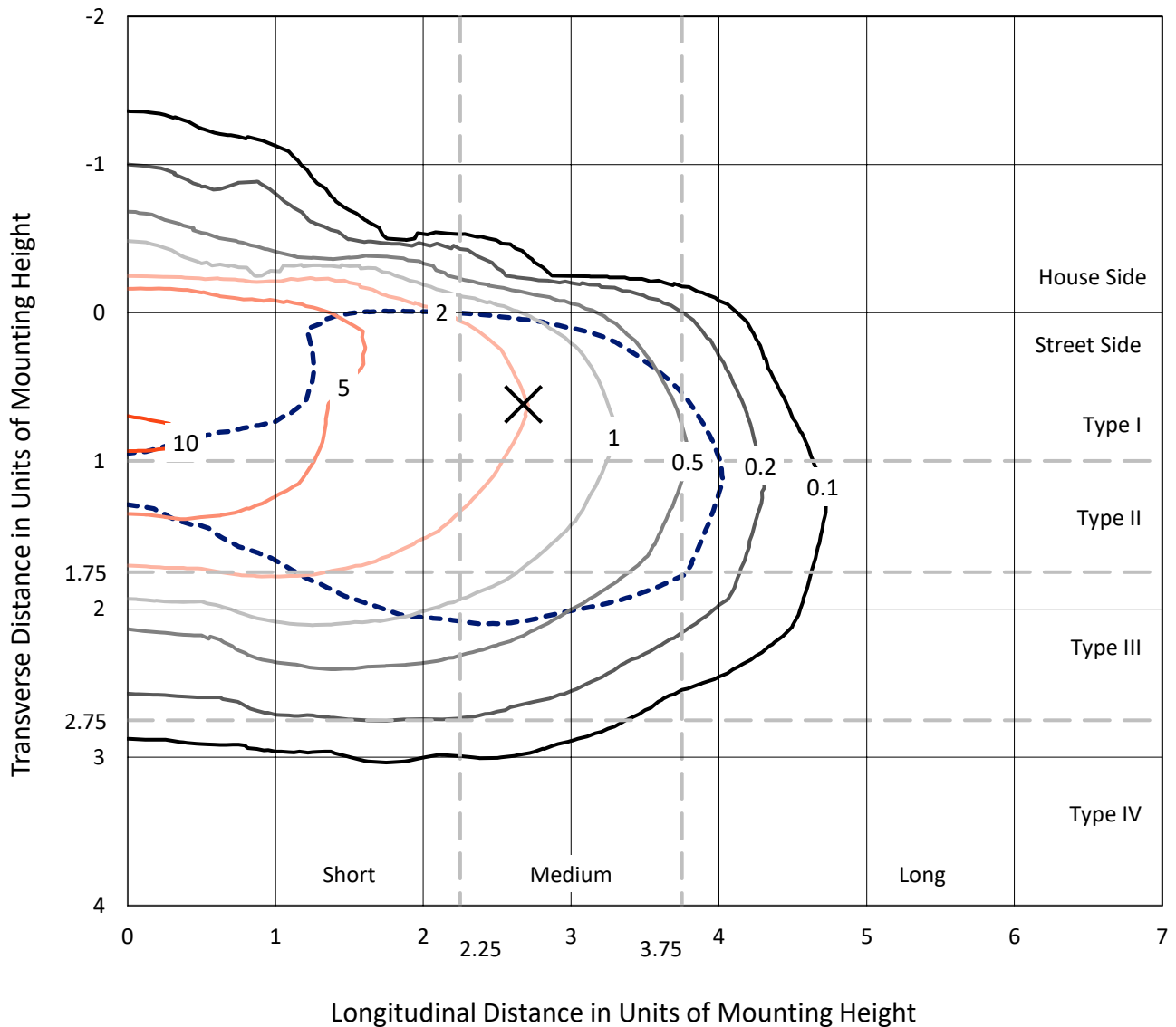
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

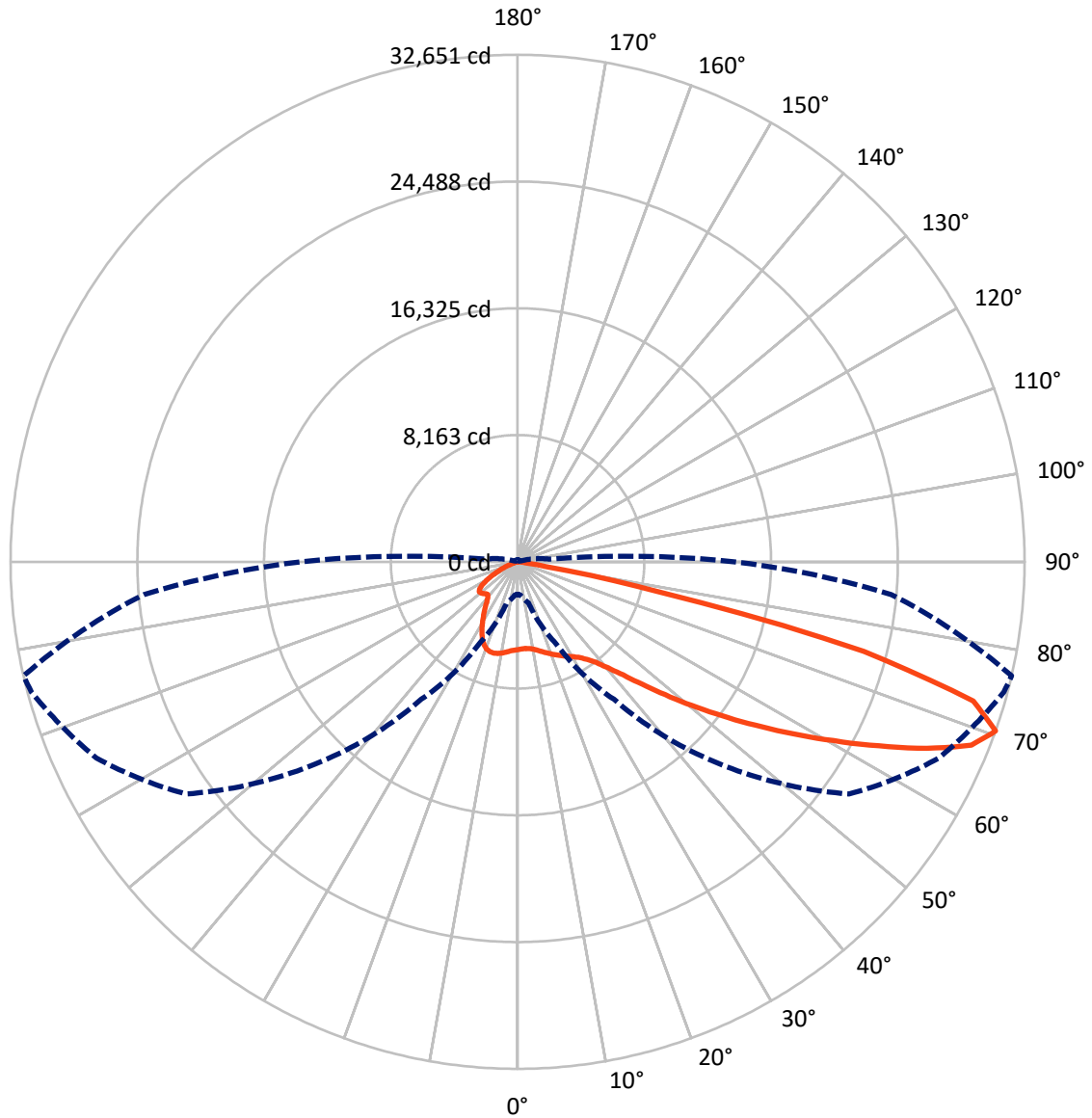
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.6 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3819.9	0.0	3819.9
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	32416.9	0.0	32416.9
	% Fixture	89.5	0.0	89.5
Total	Lumens	36236.8	0.0	36236.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	487.1	1.3
10°-20°	1156.4	3.2
20°-30°	1788.6	4.9
30°-40°	3245.6	9.0
40°-50°	6126.4	16.9
50°-60°	8852.2	24.4
60°-70°	9422.9	26.0
70°-80°	4993.5	13.8
80°-90°	164.0	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°	36236.8	100.0
0°-180°	36236.8	100.0

Coefficient of Utilization



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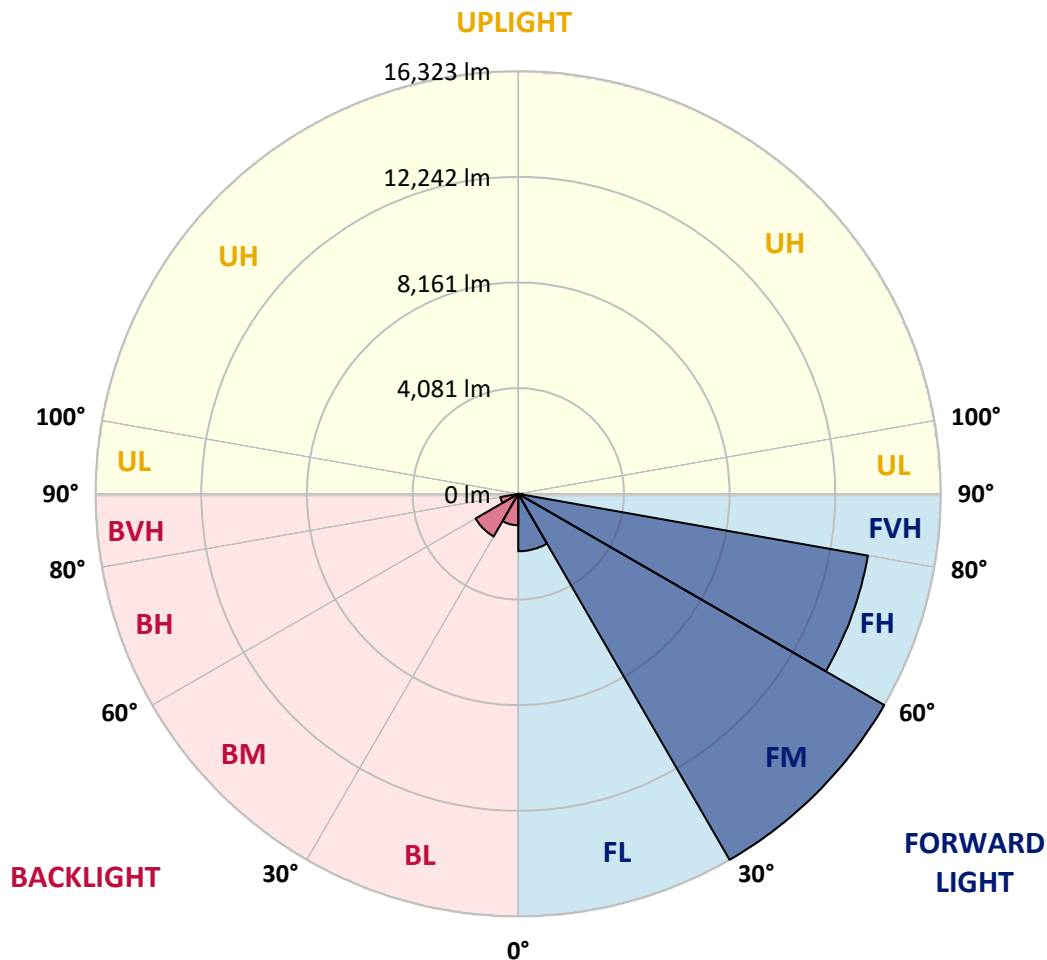
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2218.5	6.1			
FM (30°-60°)	16322.7	45.0			
FH (60°-80°)	13716.2	37.9			G5
FVH (80°-90°)	159.6	0.4			G2/225
BL (0°-30°)	1213.6	3.3	B3/2500		
BM (30°-60°)	1901.5	5.2	B2/2500		
BH (60°-80°)	700.3	1.9	B2/1000		G2/1000
BVH (80°-90°)	4.4	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-G5

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	5652.3	5652.3	5652.3	5652.3	5652.3	5652.3	5652.3	5652.3	5652.3	5652.3	5652.3
2.5°	5306.7	5354.8	5347.9	5380.0	5391.4	5437.2	5482.9	5544.7	5613.4	5611.1	5656.9
5°	5006.9	5055.0	5066.5	5109.9	5164.9	5235.8	5329.6	5453.2	5581.3	5601.9	5693.5
7.5°	4652.3	4702.6	4732.3	4819.3	4920.0	5066.5	5219.8	5400.5	5613.4	5643.1	5819.3
10°	4297.6	4343.3	4382.3	4505.8	4666.0	4883.4	5132.8	5393.7	5679.7	5723.2	5972.7
12.5°	4077.9	4121.3	4164.9	4272.4	4471.5	4736.9	5075.6	5425.7	5789.6	5851.4	6181.0
15°	4000.1	4039.0	4073.3	4169.4	4354.8	4656.9	5064.2	5492.2	5929.2	6011.5	6432.6
17.5°	4011.5	4032.1	4055.0	4128.2	4309.0	4620.2	5084.8	5606.5	6093.9	6167.2	6684.3
20°	4077.9	4089.3	4091.6	4141.9	4302.1	4615.7	5125.9	5716.3	6249.5	6347.9	6933.8
22.5°	4162.5	4167.1	4162.5	4196.9	4345.6	4650.0	5180.9	5849.1	6423.5	6515.0	7185.5
25°	4558.5	4471.5	4361.7	4295.3	4418.9	4716.3	5263.3	6027.6	6613.4	6702.7	7430.3
27.5°	5787.4	5537.9	5144.3	4702.6	4569.9	4812.5	5377.7	6208.3	6805.6	6885.7	7693.5
30°	7782.7	7455.5	6787.3	5791.9	5055.0	5013.8	5526.4	6389.1	7009.3	7096.3	7975.0
32.5°	9782.8	9702.8	8931.5	7553.9	6146.6	5462.3	5773.6	6634.0	7279.3	7348.0	8354.9
35°	11805.7	11643.3	11011.7	9650.1	7828.5	6375.4	6185.5	6954.4	7634.0	7711.8	8908.7
37.5°	13354.9	13256.5	12865.3	11743.9	9824.0	7785.1	6890.3	7450.9	8149.0	8235.9	9618.1
40°	14723.4	14677.7	14545.0	13805.7	12055.1	9629.5	7986.4	8219.9	8862.9	8965.9	10487.6
42.5°	15798.9	15906.5	15982.0	15776.1	14355.0	11734.8	9460.1	9299.9	9858.3	9963.6	11595.2
45°	16899.7	16936.3	17240.6	17538.2	16638.8	13936.2	11121.6	10565.4	11096.3	11226.8	12922.5
47.5°	17606.7	17753.2	18288.7	18812.7	18558.8	16119.4	12906.5	12059.7	12531.1	12776.0	14409.9
50°	17659.4	17936.3	18673.1	19586.2	19957.0	18197.1	14847.0	13762.3	14263.5	14533.5	15998.0
52.5°	16782.9	17213.1	18355.1	19691.5	20712.1	19957.0	16853.9	15464.9	16107.9	16460.3	17645.7
55°	12867.5	13430.5	17158.3	19119.4	20741.8	21291.1	18808.1	17238.3	18162.8	18561.0	19426.0
57.5°	11210.7	11494.6	13490.0	18126.2	20190.3	21828.8	20574.8	18927.1	20398.6	20892.9	21108.0
60°	9327.4	9700.4	11313.7	16501.5	19442.1	21881.5	22135.5	21105.7	22821.9	23378.1	22650.3
62.5°	6338.8	6743.9	8348.0	13709.7	18419.1	21856.3	23414.7	23348.3	25515.4	26112.7	23957.0
65°	3926.9	4180.9	5238.1	11194.7	16988.9	21883.7	24753.3	26071.5	28357.5	28963.9	24968.5
67.5°	3103.1	3219.7	3771.3	8595.1	14524.4	21265.9	26089.7	28632.1	31032.7	31513.2	25277.4
70°	2084.7	2155.7	2743.7	5762.1	10805.8	18414.5	26064.6	29918.2	32410.3	32650.6	24151.6
72.5°	1098.4	1153.3	1604.1	2668.3	6526.5	13089.6	21970.7	28380.4	31039.6	30677.9	20643.4
75°	549.2	640.7	1080.1	1354.7	2787.3	7299.9	13643.3	22375.7	24430.7	23030.2	13245.2
77.5°	416.5	503.5	892.5	892.5	970.3	2457.7	5778.1	12204.0	11256.6	9373.2	3887.9
80°	265.5	343.3	780.3	675.1	405.1	624.7	1505.7	3418.8	2391.3	1819.3	707.1
82.5°	155.6	224.3	649.8	446.2	226.5	231.1	425.7	727.7	620.1	482.9	217.4
85°	61.8	146.5	446.2	176.2	89.3	57.2	128.1	155.6	128.1	96.1	54.9
87.5°	0.0	34.3	77.8	0.0	6.9	4.6	9.1	11.5	11.5	9.1	18.3
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°	5652.3	5652.3	5652.3	5652.3	5652.3	5652.3	5652.3	5652.3	5652.3	5652.3	5652.3
2.5°	5677.5	5682.1	5695.7	5698.1	5666.0	5624.8	5608.8	5601.9	5574.5	5572.2	5576.8
5°	5746.2	5766.8	5746.2	5686.6	5544.7	5345.7	5194.6	5071.1	4959.0	4924.6	4904.0
7.5°	5883.4	5904.0	5842.2	5608.8	5251.8	4855.9	4498.9	4247.2	4020.7	3936.0	3901.7
10°	6080.2	6107.7	5913.1	5441.7	4810.1	4174.0	3569.9	3144.2	2812.4	2677.4	2620.2
12.5°	6327.3	6338.8	5952.1	5187.7	4235.8	3327.3	2471.5	2016.1	1720.9	1611.0	1576.7
15°	6599.7	6583.7	5956.7	4842.2	3453.1	2352.5	1613.4	1325.0	1206.0	1169.3	1169.3
17.5°	6885.7	6819.3	5865.2	4343.3	2595.0	1608.7	1196.8	1128.2	1107.6	1098.4	1096.1
20°	7167.2	7018.5	5698.1	3691.1	1862.7	1201.4	1087.0	1066.4	1054.9	1050.3	1045.8
22.5°	7423.5	7169.5	5412.0	2933.7	1352.4	1061.8	1027.5	1009.2	988.6	979.4	977.1
25°	7672.9	7256.5	5009.3	2226.6	1082.4	993.1	965.7	931.4	903.9	892.5	887.9
27.5°	7915.5	7311.3	4505.8	1647.6	965.7	929.1	878.7	830.7	810.1	805.5	800.9
30°	8174.1	7329.7	3933.7	1228.9	894.7	849.0	775.7	720.9	709.4	711.7	711.7
32.5°	8489.9	7357.1	3357.1	1006.9	835.3	752.9	665.9	608.7	599.5	608.7	606.4
35°	8867.5	7412.1	2801.0	926.8	782.6	654.5	560.7	512.6	503.5	510.3	508.0
37.5°	9380.1	7501.3	2281.5	910.8	739.1	572.1	471.4	432.6	432.6	434.8	432.6
40°	10062.0	7739.3	1817.0	899.3	716.3	510.3	398.2	382.1	389.0	393.6	393.6
42.5°	10892.7	8245.0	1503.5	885.6	691.1	482.9	361.5	354.6	366.1	370.7	370.7
45°	11824.1	8885.7	1393.6	862.7	668.2	501.1	345.5	336.4	350.1	352.4	354.6
47.5°	12787.5	9512.8	1379.9	837.5	645.3	528.6	341.0	320.4	336.4	338.7	341.0
50°	13762.3	9922.4	1393.6	798.7	608.7	528.6	343.3	304.3	318.1	324.9	327.3
52.5°	14744.0	10110.1	1384.5	714.0	544.6	496.6	343.3	290.6	304.3	308.9	308.9
55°	15695.9	10073.4	1244.9	588.1	462.3	439.4	334.2	279.2	288.3	290.6	290.6
57.5°	16448.9	9563.1	986.3	457.7	375.3	366.1	304.3	265.5	272.3	270.0	270.0
60°	16842.5	8441.8	704.8	352.4	295.2	288.3	267.7	247.1	251.7	240.3	238.0
62.5°	16847.0	6958.9	471.4	279.2	235.7	228.9	228.9	222.0	217.4	194.5	187.7
65°	16487.7	5313.6	313.5	222.0	189.9	178.5	192.2	189.9	173.9	141.9	137.4
67.5°	15673.1	3483.0	238.0	173.9	146.5	139.6	153.3	160.2	148.7	119.0	116.7
70°	13998.0	2027.6	196.8	135.0	109.9	103.0	123.6	137.4	123.6	96.1	91.5
72.5°	11627.3	1093.9	160.2	100.7	75.5	68.7	98.4	112.1	98.4	70.9	68.7
75°	7544.8	585.8	123.6	66.3	38.9	43.5	73.2	82.4	68.7	45.8	41.2
77.5°	2533.2	258.6	77.8	32.1	18.3	18.3	43.5	50.3	32.1	16.0	13.7
80°	565.2	107.5	32.1	13.7	6.9	6.9	9.1	9.1	4.6	0.0	0.0
82.5°	185.3	43.5	13.7	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	70.9	16.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	27.5	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)