

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: P968939

Luminaire Tested: **NAV-SB5C-830-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968939
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-830-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29500.5 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G4

Input Watts (W): 249.5
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

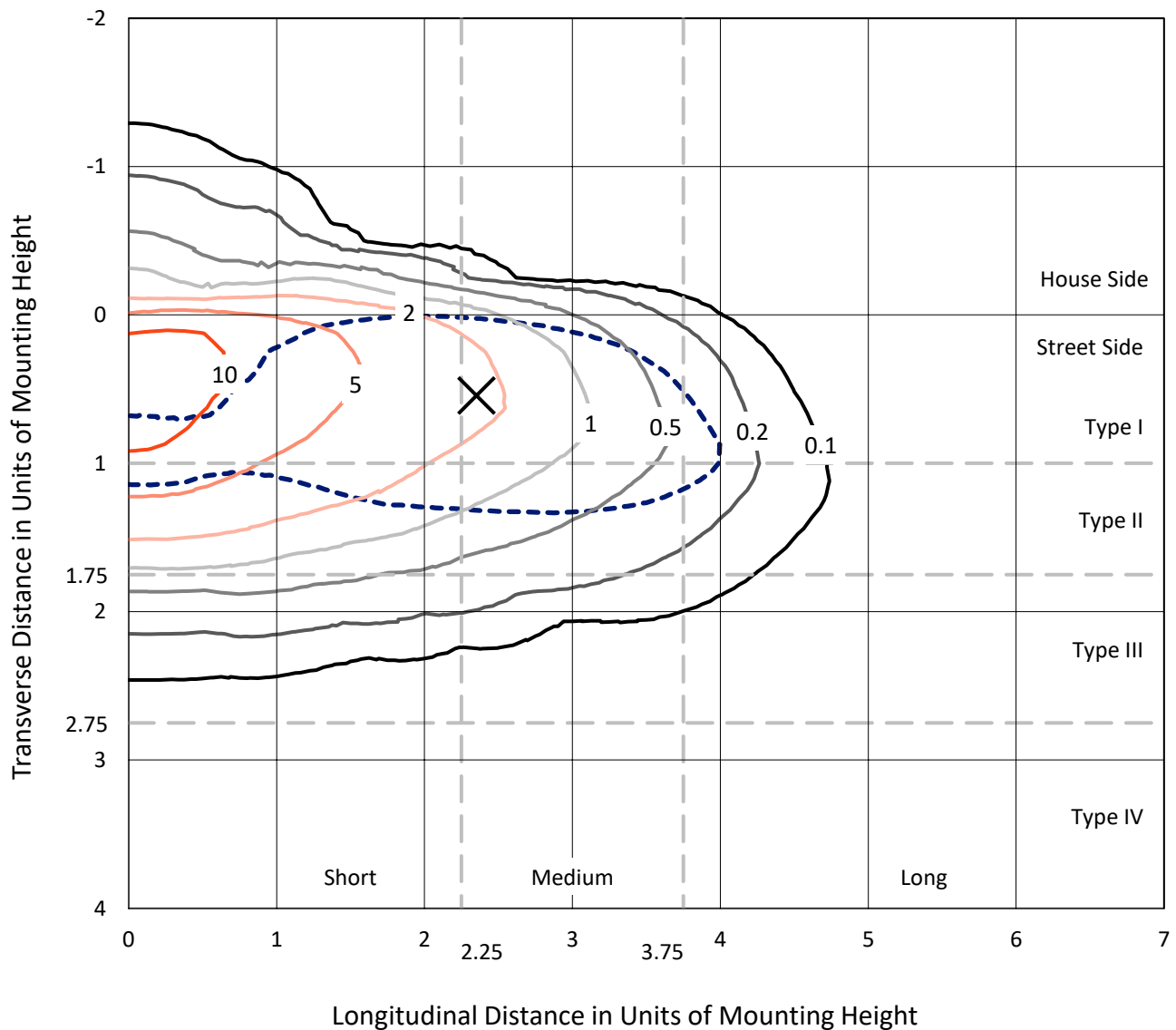


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Iso-Footcandle Lines of Horizontal Illumination

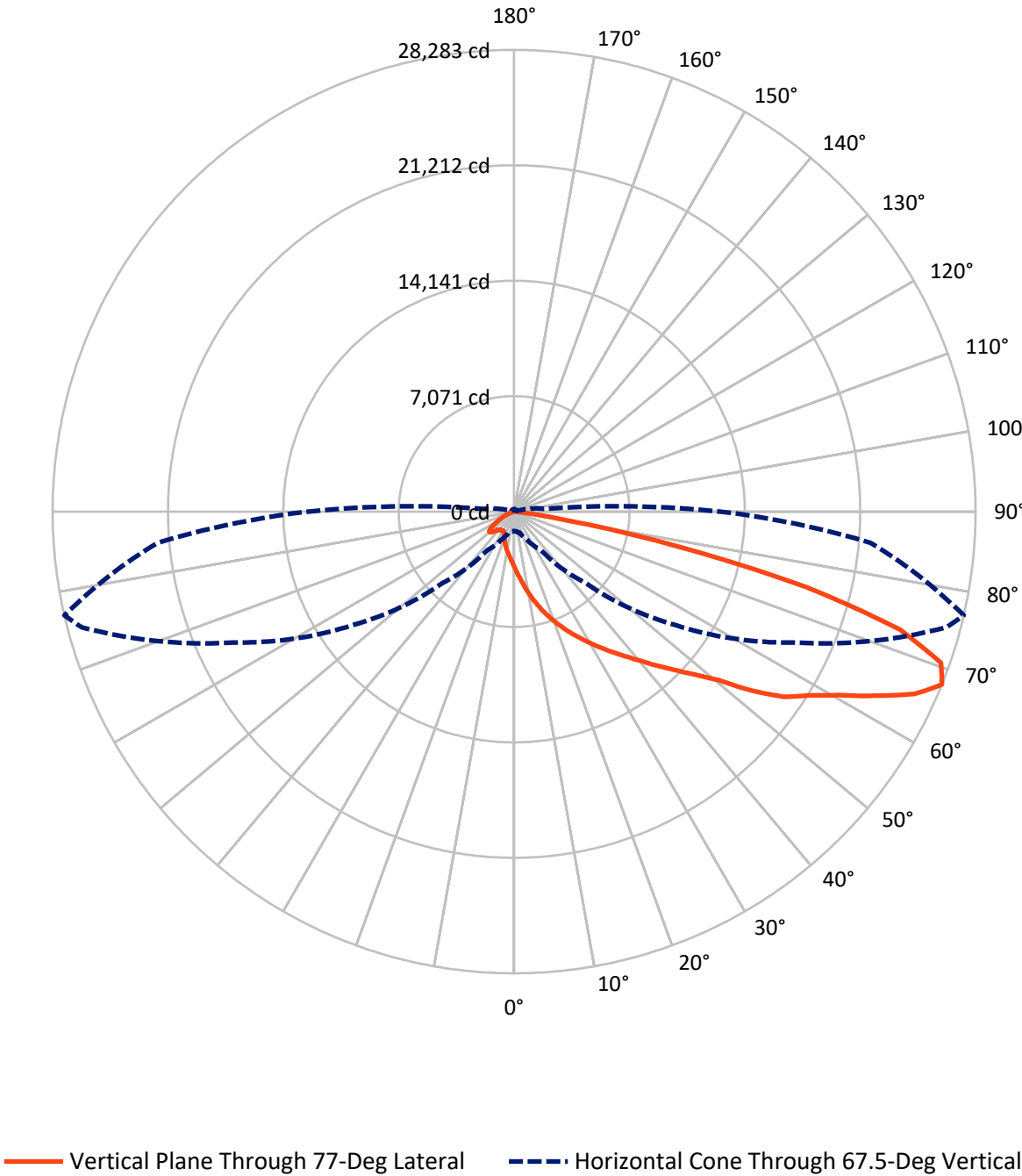
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.7 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	2170.4	0.0	2170.4
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	27330.2	0.0	27330.2
	% Fixture	92.6	0.0	92.6
Total	Lumens	29500.5	0.0	29500.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	347.2	1.2
10°-20°	1215.9	4.1
20°-30°	2346.4	8.0
30°-40°	4073.4	13.8
40°-50°	5914.4	20.0
50°-60°	6791.9	23.0
60°-70°	5896.6	20.0
70°-80°	2777.4	9.4
80°-90°	137.4	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°	29500.5	100.0
0°-180°	29500.5	100.0

Coefficient of Utilization



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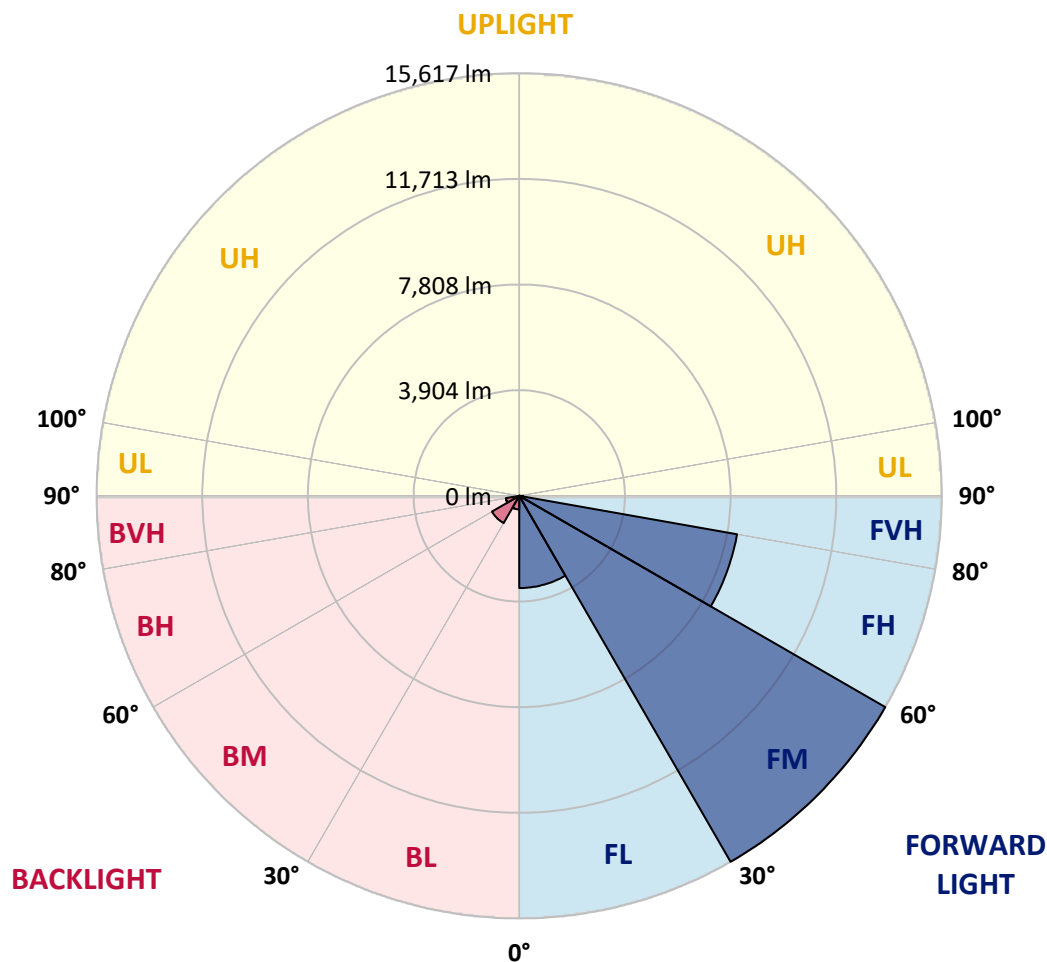
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3407.0	11.5			
FM	(30°-60°)	15616.8	52.9			
FH	(60°-80°)	8171.6	27.7			G4/12000
FVH	(80°-90°)	134.8	0.5			G2/225
BL	(0°-30°)	502.5	1.7	B2/1000		
BM	(30°-60°)	1162.9	3.9	B2/2500		
BH	(60°-80°)	502.5	1.7	B2/1000		G2/1000
BVH	(80°-90°)	2.5	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-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3401.9	3401.9	3401.9	3401.9	3401.9	3401.9	3401.9	3401.9	3401.9	3401.9	3401.9
2.5°	4709.8	4739.1	4697.0	4616.4	4495.4	4416.7	4224.3	4043.0	3841.5	3777.4	3575.9
5°	5741.2	5766.9	5719.2	5631.2	5470.0	5316.2	5063.4	4684.1	4290.3	4164.0	3806.6
7.5°	6505.1	6519.7	6501.5	6420.8	6267.0	6092.9	5810.8	5362.0	4777.6	4638.3	4090.7
10°	7054.7	7102.3	7096.8	7065.6	6963.0	6822.0	6521.6	6010.5	5323.5	5144.0	4411.2
12.5°	7419.3	7472.4	7503.5	7573.1	7567.6	7477.8	7214.1	6673.7	5867.6	5656.9	4772.1
15°	7525.4	7582.2	7701.3	7862.6	8005.5	8051.2	7866.2	7323.9	6466.6	6197.4	5142.1
17.5°	7465.0	7552.9	7695.8	7950.4	8263.8	8470.7	8450.6	7952.3	7010.7	6702.9	5504.9
20°	7598.7	7683.0	7794.7	8009.0	8373.6	8749.2	8899.4	8553.1	7551.1	7228.7	5885.9
22.5°	8338.8	8324.1	8335.2	8369.9	8588.0	8959.8	9269.4	9099.0	8086.0	7756.3	6288.9
25°	9511.3	9445.3	9333.5	9144.8	9089.9	9269.4	9591.8	9582.7	8650.3	8296.7	6701.1
27.5°	10855.9	10844.9	10582.9	10128.6	9872.1	9802.5	9956.4	10053.5	9209.0	8831.6	7115.1
30°	12143.7	12173.0	11819.5	11313.8	10843.1	10570.1	10430.8	10500.5	9776.9	9408.7	7541.9
32.5°	13264.8	13296.0	12911.2	12319.6	11737.0	11407.2	11114.2	10942.0	10396.1	9994.9	8010.9
35°	14211.9	14243.1	13801.5	13147.6	12526.5	12227.9	11896.4	11425.6	11018.9	10645.2	8533.0
37.5°	15058.3	15049.0	14457.4	13797.9	13187.9	12951.6	12777.5	12021.0	11660.1	11299.2	9111.8
40°	15558.4	15596.8	15091.2	14363.9	13772.2	13600.0	13589.0	12759.2	12400.1	12050.3	9745.7
42.5°	15704.9	15772.7	15406.3	14809.1	14272.4	14085.6	14373.1	13557.9	13261.1	12920.4	10462.0
45°	15441.1	15507.0	15340.4	14926.4	14613.1	14492.2	15047.2	14386.0	14180.8	13843.6	11269.9
47.5°	14671.7	14754.2	14794.4	14706.5	14702.8	14825.6	15651.7	15257.9	15272.6	14928.2	12206.0
50°	13182.4	13321.6	13691.6	14003.0	14484.9	15089.4	16239.8	16203.2	16503.6	16206.9	13426.1
52.5°	10474.8	10672.7	11947.7	12799.5	13882.2	15039.9	16886.5	17720.0	18663.4	18229.3	15146.2
55°	8417.6	8417.6	9454.5	11048.2	12706.1	14713.9	17168.6	18705.5	20134.5	20031.9	16357.1
57.5°	6862.3	6944.8	7606.0	9014.8	11004.2	13937.1	17342.6	19324.7	21319.7	21244.6	17540.5
60°	4235.4	4413.0	5662.4	7052.8	9068.0	12554.0	17232.7	19951.2	22757.8	22818.1	18965.7
62.5°	2385.2	2451.1	3008.0	5074.4	7051.0	10694.6	16391.9	20301.1	24596.9	24853.4	20434.9
65°	1646.9	1679.9	1894.2	3158.2	4887.5	8514.7	14748.6	20083.1	26439.9	26958.3	21680.6
67.5°	1196.3	1212.7	1346.4	1928.9	2899.9	6173.5	12173.0	18984.0	27416.3	28282.7	21918.7
70°	919.6	930.6	1027.7	1267.7	1712.9	3810.3	8840.7	16798.5	26709.1	27744.2	20698.6
72.5°	747.4	758.4	833.5	938.0	1135.8	2253.3	5358.3	13642.1	23587.6	24705.1	17621.1
75°	630.2	644.8	712.6	780.4	890.3	1447.2	2513.4	9500.2	17738.3	18471.1	12253.6
77.5°	349.9	322.5	578.9	646.7	751.1	915.9	1176.1	5591.0	9934.4	10137.8	5437.1
80°	218.0	225.3	459.8	520.3	577.1	461.7	538.5	2152.5	3444.0	3271.8	1053.4
82.5°	12.8	29.3	353.5	375.6	395.6	197.8	203.4	730.9	829.8	762.1	186.9
85°	0.0	0.0	161.2	130.1	137.4	56.8	58.6	170.4	111.7	121.0	36.6
87.5°	0.0	0.0	0.0	3.7	0.0	5.5	11.0	14.7	5.5	7.3	12.8
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°	3401.9	3401.9	3401.9	3401.9	3401.9	3401.9	3401.9	3401.9	3401.9	3401.9	3401.9
2.5°	3447.7	3319.4	3059.3	2804.6	2597.7	2405.3	2267.9	2137.8	2071.8	2068.2	2064.6
5°	3552.0	3282.8	2762.5	2302.7	1932.6	1635.9	1443.5	1306.2	1236.6	1212.7	1209.1
7.5°	3698.6	3293.7	2502.3	1863.0	1427.0	1172.4	1062.5	1018.5	1003.9	987.4	983.7
10°	3883.6	3319.4	2269.8	1500.3	1124.8	996.5	952.6	934.3	923.3	912.2	908.7
12.5°	4090.7	3343.2	2038.9	1245.7	989.2	923.3	892.2	870.1	855.5	842.7	839.0
15°	4292.2	3357.9	1799.0	1068.0	919.6	866.5	833.5	809.7	789.6	774.9	773.1
17.5°	4491.9	3378.0	1573.6	961.8	862.8	809.7	776.7	747.4	730.9	714.4	712.6
20°	4713.5	3374.4	1361.1	886.6	806.1	752.9	718.1	690.6	674.1	655.8	653.9
22.5°	4918.7	3356.1	1174.2	822.6	747.4	696.1	657.6	630.2	613.7	599.0	597.2
25°	5154.9	3341.4	1018.5	763.9	692.5	641.1	599.0	573.4	555.0	542.2	540.4
27.5°	5382.2	3319.4	905.0	710.7	639.3	589.9	549.6	520.3	503.8	494.7	494.7
30°	5605.6	3313.9	862.8	659.5	591.7	542.2	501.9	474.5	461.7	458.0	456.1
32.5°	5874.9	3328.6	881.2	641.1	547.8	498.3	459.8	439.6	426.8	426.8	426.8
35°	6162.5	3324.9	908.7	657.6	518.4	454.3	425.0	412.2	399.3	399.3	399.3
37.5°	6523.4	3330.4	930.6	685.1	507.5	417.7	401.2	384.7	377.4	377.4	377.4
40°	7061.9	3511.8	919.6	709.0	503.8	392.1	359.1	353.5	348.1	348.1	348.1
42.5°	7721.4	3905.7	934.3	710.7	501.9	373.7	329.7	340.7	327.9	326.1	324.2
45°	8443.2	4336.2	1027.7	672.3	500.1	364.6	315.1	327.9	307.8	307.8	307.8
47.5°	9159.5	4763.0	1123.0	617.4	494.7	362.7	302.3	294.9	289.5	291.3	291.3
50°	10146.9	5111.1	1159.6	542.2	481.7	359.1	278.5	280.2	276.6	280.2	280.2
52.5°	11222.2	5184.2	1115.6	458.0	445.2	348.1	262.0	269.3	267.4	271.1	271.1
55°	11892.7	5105.5	921.5	381.0	388.4	304.1	245.5	260.1	260.1	260.1	260.1
57.5°	12585.2	4770.2	653.9	309.5	322.5	249.2	230.8	250.9	249.2	247.3	247.3
60°	13083.4	4228.0	430.5	254.6	256.5	205.2	214.3	236.4	234.5	225.3	225.3
62.5°	13455.3	3629.0	276.6	216.2	196.0	185.0	196.0	214.3	207.0	186.9	183.2
65°	13413.2	2799.2	212.5	185.0	161.2	161.2	170.4	186.9	164.9	131.9	128.2
67.5°	12631.0	1894.2	175.9	155.7	135.6	133.8	141.0	155.7	141.0	111.7	108.0
70°	11233.2	1238.4	141.0	121.0	108.0	98.9	113.6	133.8	119.1	89.8	86.1
72.5°	9117.4	754.7	106.3	87.9	78.8	64.2	89.8	109.9	95.2	65.9	62.3
75°	5898.8	384.7	73.3	56.8	42.1	38.4	65.9	82.4	65.9	40.3	34.8
77.5°	2256.9	161.2	40.3	25.6	21.9	18.3	36.6	49.5	27.5	9.1	7.3
80°	434.2	67.8	20.2	12.8	11.0	7.3	5.5	3.7	0.0	0.0	0.0
82.5°	75.1	21.9	7.3	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	25.6	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.1	0.0	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)