

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: P968449

Luminaire Tested: **NAV-SB5B-835-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968449
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-SB5B-835-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 450mA 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: 22514.1 lumens
Efficiency: N/A
Efficacy: 123.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G4

Input Watts (W): 182.7
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

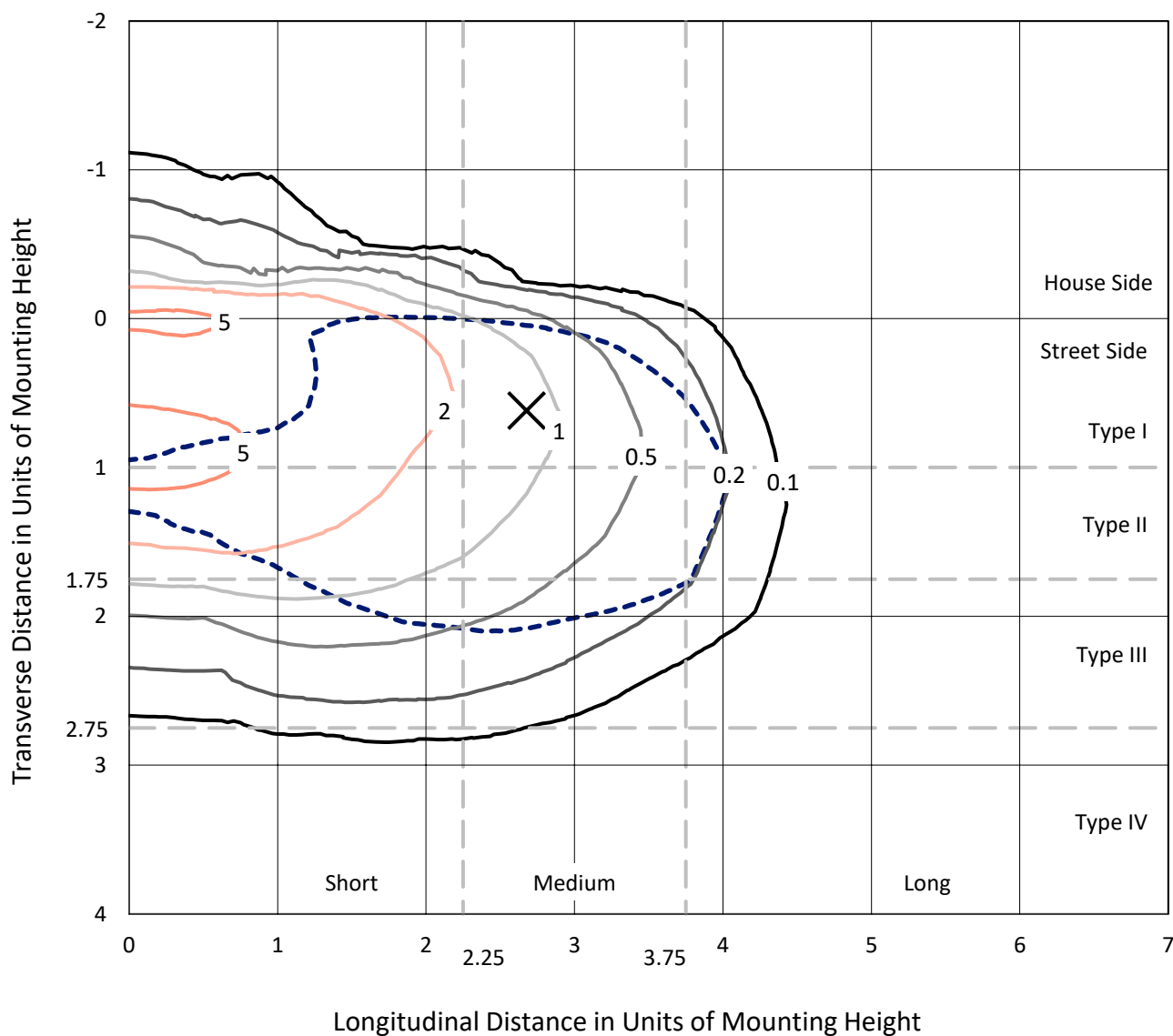


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Iso-Footcandle Lines of Horizontal Illumination

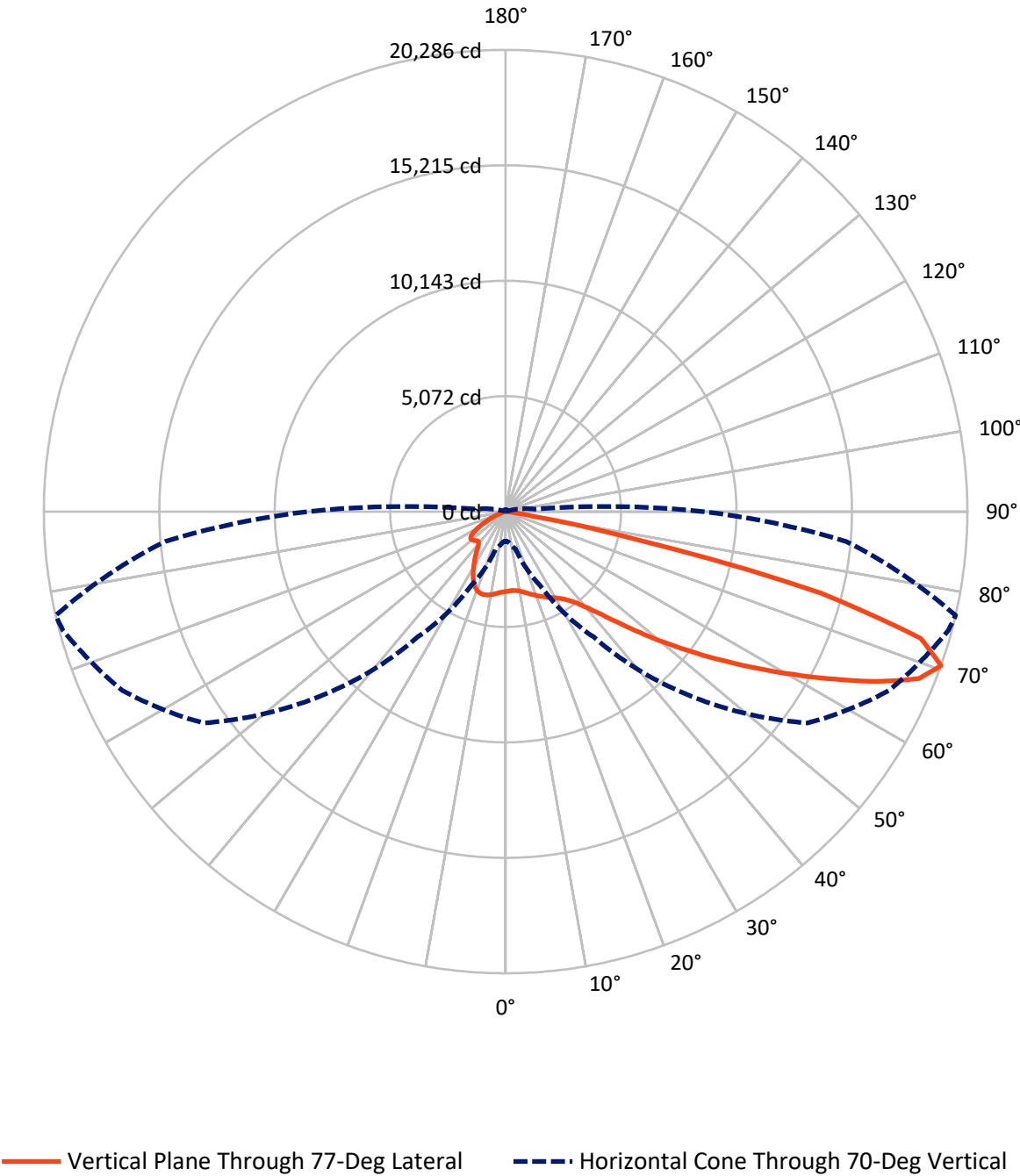
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2373.3	0.0	2373.3
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	20140.8	0.0	20140.8
	% Fixture	89.5	0.0	89.5
Total	Lumens	22514.1	0.0	22514.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	302.7	1.3
10°-20°	718.5	3.2
20°-30°	1111.3	4.9
30°-40°	2016.5	9.0
40°-50°	3806.4	16.9
50°-60°	5499.9	24.4
60°-70°	5854.5	26.0
70°-80°	3102.5	13.8
80°-90°	101.9	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°	22514.1	100.0
0°-180°	22514.1	100.0

Coefficient of Utilization



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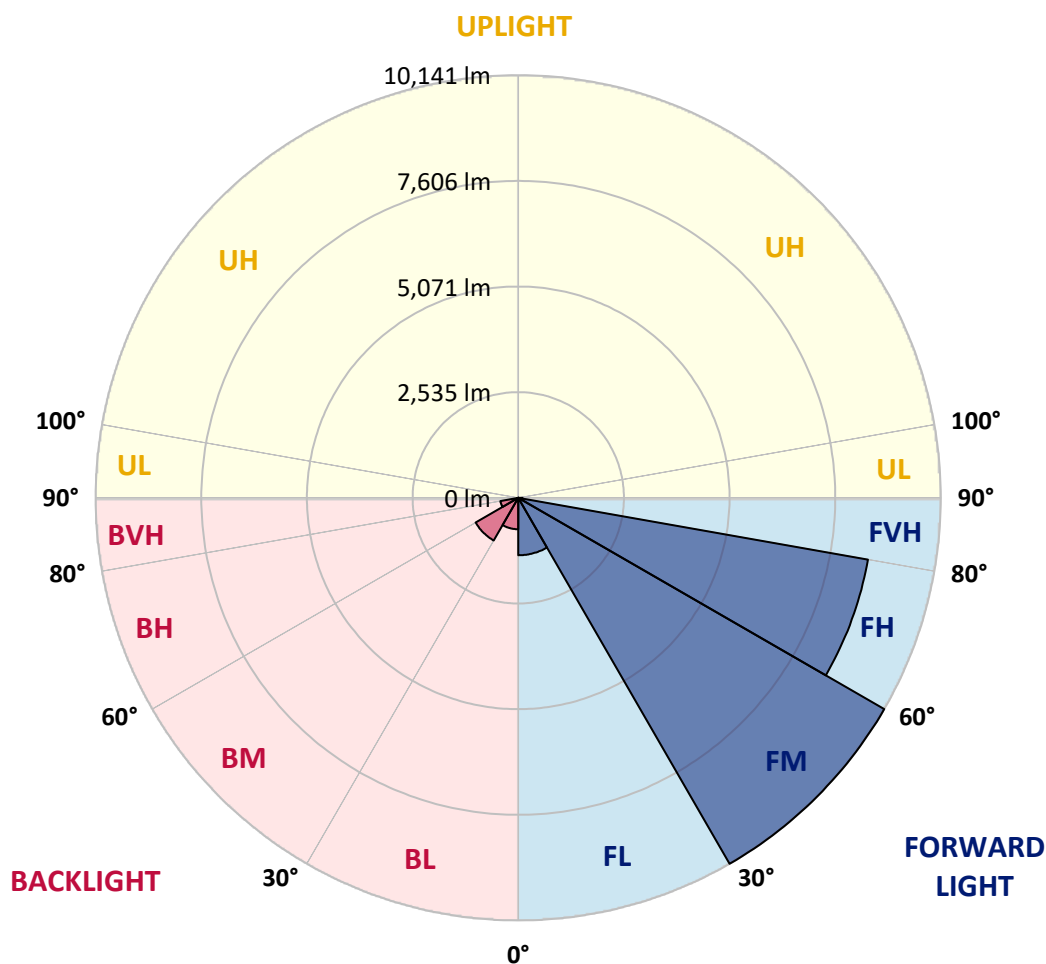
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1378.4	6.1			
FM	(30°-60°)	10141.4	45.0			
FH	(60°-80°)	8521.9	37.9			G4/12000
FVH	(80°-90°)	99.1	0.4			G1/100
BL	(0°-30°)	754.0	3.3	B2/1000		
BM	(30°-60°)	1181.4	5.2	B2/2500		
BH	(60°-80°)	435.1	1.9	B1/500		G1/500
BVH	(80°-90°)	2.7	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8
2.5°	3297.1	3326.9	3322.7	3342.6	3349.7	3378.2	3406.6	3444.9	3487.7	3486.2	3514.6
5°	3110.9	3140.7	3147.8	3174.8	3209.0	3253.0	3311.4	3388.1	3467.7	3480.5	3537.4
7.5°	2890.5	2921.8	2940.2	2994.2	3056.9	3147.8	3243.1	3355.4	3487.7	3506.1	3615.6
10°	2670.1	2698.5	2722.7	2799.5	2899.0	3034.1	3189.1	3351.1	3528.9	3555.8	3710.8
12.5°	2533.6	2560.7	2587.6	2654.4	2778.2	2943.1	3153.5	3371.0	3597.1	3635.5	3840.3
15°	2485.3	2509.4	2530.7	2590.5	2705.7	2893.4	3146.4	3412.2	3683.8	3735.0	3996.6
17.5°	2492.4	2505.2	2519.3	2564.9	2677.2	2870.6	3159.2	3483.4	3786.2	3831.7	4153.0
20°	2533.6	2540.8	2542.1	2573.5	2673.0	2867.7	3184.8	3551.6	3882.9	3944.0	4308.0
22.5°	2586.2	2589.0	2586.2	2607.5	2700.0	2889.1	3218.9	3634.0	3990.9	4047.8	4464.4
25°	2832.2	2778.2	2709.9	2668.7	2745.5	2930.3	3270.1	3744.9	4108.9	4164.4	4616.5
27.5°	3595.7	3440.7	3196.2	2921.8	2839.2	2990.0	3341.2	3857.3	4228.3	4278.1	4780.0
30°	4835.4	4632.2	4217.0	3598.6	3140.7	3115.1	3433.6	3969.6	4354.9	4408.9	4955.0
32.5°	6078.1	6028.3	5549.2	4693.3	3818.9	3393.8	3587.2	4121.7	4522.7	4565.3	5190.9
35°	7335.0	7234.0	6841.6	5995.6	4863.9	3961.1	3843.0	4320.8	4743.1	4791.4	5535.0
37.5°	8297.5	8236.4	7993.3	7296.6	6103.7	4836.9	4281.0	4629.3	5063.0	5117.0	5975.7
40°	9147.7	9119.3	9036.8	8577.6	7490.0	5982.8	4962.0	5107.1	5506.5	5570.6	6516.0
42.5°	9816.0	9882.7	9929.7	9801.8	8918.8	7290.9	5877.7	5778.1	6125.0	6190.4	7204.1
45°	10499.9	10522.5	10711.7	10896.6	10337.7	8658.7	6909.8	6564.4	6894.3	6975.2	8028.8
47.5°	10939.2	11030.1	11362.8	11688.5	11530.6	10015.1	8018.9	7492.7	7785.7	7937.8	8953.0
50°	10971.9	11143.9	11601.8	12169.0	12399.3	11306.0	9224.5	8550.6	8861.9	9029.7	9939.6
52.5°	10427.3	10694.6	11404.0	12234.4	12868.6	12399.3	10471.4	9608.3	10007.9	10226.8	10963.3
55°	7994.7	8344.4	10660.5	11878.9	12887.0	13228.2	11685.6	10710.2	11284.6	11532.1	12069.5
57.5°	6965.3	7141.6	8381.4	11261.9	12544.4	13562.4	12783.2	11759.5	12673.7	12980.8	13114.5
60°	5795.1	6026.9	7029.2	10252.5	12079.4	13595.1	13752.8	13113.0	14179.4	14524.9	14072.7
62.5°	3938.4	4190.0	5186.7	8517.9	11443.9	13579.4	14547.6	14506.4	15852.9	16223.9	14884.6
65°	2439.8	2597.6	3254.5	6955.3	10555.2	13596.5	15379.4	16198.4	17618.7	17995.5	15513.1
67.5°	1927.9	2000.5	2343.0	5340.2	9024.0	13212.6	16209.8	17789.3	19280.8	19579.3	15704.9
70°	1295.3	1339.4	1704.7	3580.0	6713.6	11441.0	16194.1	18588.4	20136.6	20286.0	15005.5
72.5°	682.4	716.6	996.7	1657.8	4054.9	8132.6	13650.5	17632.9	19285.1	19060.4	12825.9
75°	341.2	398.1	671.1	841.7	1731.7	4535.5	8476.6	13902.2	15178.9	14308.8	8229.2
77.5°	258.8	312.8	554.5	554.5	602.8	1526.9	3590.0	7582.3	6993.8	5823.6	2415.6
80°	164.9	213.3	484.8	419.4	251.6	388.2	935.5	2124.1	1485.7	1130.3	439.3
82.5°	96.7	139.3	403.7	277.3	140.7	143.6	264.4	452.1	385.3	300.0	135.1
85°	38.4	91.0	277.3	109.5	55.5	35.6	79.6	96.7	79.6	59.8	34.1
87.5°	0.0	21.3	48.4	0.0	4.3	2.9	5.6	7.1	7.1	5.6	11.4
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°	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8
2.5°	3527.4	3530.3	3538.8	3540.2	3520.4	3494.7	3484.8	3480.5	3463.5	3462.0	3464.9
5°	3570.1	3582.9	3570.1	3533.1	3444.9	3321.3	3227.4	3150.6	3081.0	3059.6	3046.9
7.5°	3655.4	3668.2	3629.8	3484.8	3263.0	3017.0	2795.2	2638.9	2498.0	2445.4	2424.1
10°	3777.6	3794.8	3673.9	3381.0	2988.6	2593.4	2218.0	1953.5	1747.3	1663.5	1627.9
12.5°	3931.2	3938.4	3698.1	3223.2	2631.7	2067.2	1535.6	1252.6	1069.2	1000.9	979.6
15°	4100.4	4090.5	3700.9	3008.5	2145.4	1461.5	1002.3	823.2	749.3	726.5	726.5
17.5°	4278.1	4236.9	3644.0	2698.5	1612.3	999.5	743.6	700.9	688.2	682.4	681.0
20°	4453.0	4360.6	3540.2	2293.3	1157.3	746.4	675.4	662.6	655.5	652.6	649.7
22.5°	4612.3	4454.4	3362.5	1822.8	840.3	659.7	638.4	627.0	614.2	608.5	607.1
25°	4767.3	4508.5	3112.3	1383.4	672.5	617.0	600.0	578.7	561.6	554.5	551.7
27.5°	4918.0	4542.6	2799.5	1023.7	600.0	577.3	545.9	516.1	503.3	500.5	497.6
30°	5078.6	4554.0	2444.0	763.5	556.0	527.5	482.0	447.8	440.7	442.2	442.2
32.5°	5274.9	4571.0	2085.8	625.6	519.0	467.8	413.7	378.2	372.5	378.2	376.8
35°	5509.4	4605.1	1740.2	575.8	486.3	406.6	348.3	318.5	312.8	317.0	315.6
37.5°	5827.8	4660.6	1417.5	565.9	459.2	355.5	292.8	268.8	268.8	270.1	268.8
40°	6251.6	4808.5	1128.9	558.7	445.1	317.0	247.4	237.4	241.7	244.6	244.6
42.5°	6767.7	5122.6	934.1	550.2	429.4	300.0	224.7	220.4	227.4	230.3	230.3
45°	7346.4	5520.8	865.8	536.0	415.1	311.4	214.7	209.0	217.5	218.9	220.4
47.5°	7944.9	5910.4	857.3	520.4	401.0	328.4	211.9	199.1	209.0	210.4	211.9
50°	8550.6	6164.9	865.8	496.2	378.2	328.4	213.3	189.1	197.6	201.9	203.4
52.5°	9160.5	6281.4	860.2	443.6	338.4	308.5	213.3	180.6	189.1	192.0	192.0
55°	9752.0	6258.6	773.5	365.4	287.2	273.0	207.6	173.4	179.2	180.6	180.6
57.5°	10219.8	5941.6	612.7	284.3	233.2	227.4	189.1	164.9	169.2	167.8	167.8
60°	10464.3	5244.9	437.9	218.9	183.4	179.2	166.4	153.5	156.4	149.2	147.9
62.5°	10467.1	4323.7	292.8	173.4	146.5	142.2	142.2	137.9	135.1	120.8	116.5
65°	10244.0	3301.4	194.7	137.9	118.0	110.9	119.4	118.0	108.0	88.1	85.3
67.5°	9737.8	2164.0	147.9	108.0	91.0	86.7	95.2	99.5	92.5	73.9	72.5
70°	8697.0	1259.7	122.3	83.8	68.3	64.0	76.8	85.3	76.8	59.8	56.9
72.5°	7224.1	679.6	99.5	62.5	46.9	42.6	61.1	69.7	61.1	44.1	42.6
75°	4687.6	364.0	76.8	41.2	24.2	27.1	45.5	51.1	42.6	28.4	25.6
77.5°	1573.9	160.6	48.4	19.9	11.4	11.4	27.1	31.3	19.9	9.9	8.5
80°	351.2	66.8	19.9	8.5	4.3	4.3	5.6	5.6	2.9	0.0	0.0
82.5°	115.2	27.1	8.5	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	44.1	9.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	17.0	1.4	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)