

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: P968795

Luminaire Tested: **NAV-SB5C-735-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968795
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-735-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29869.5 lumens
Efficiency: N/A
Efficacy: 119.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G5

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

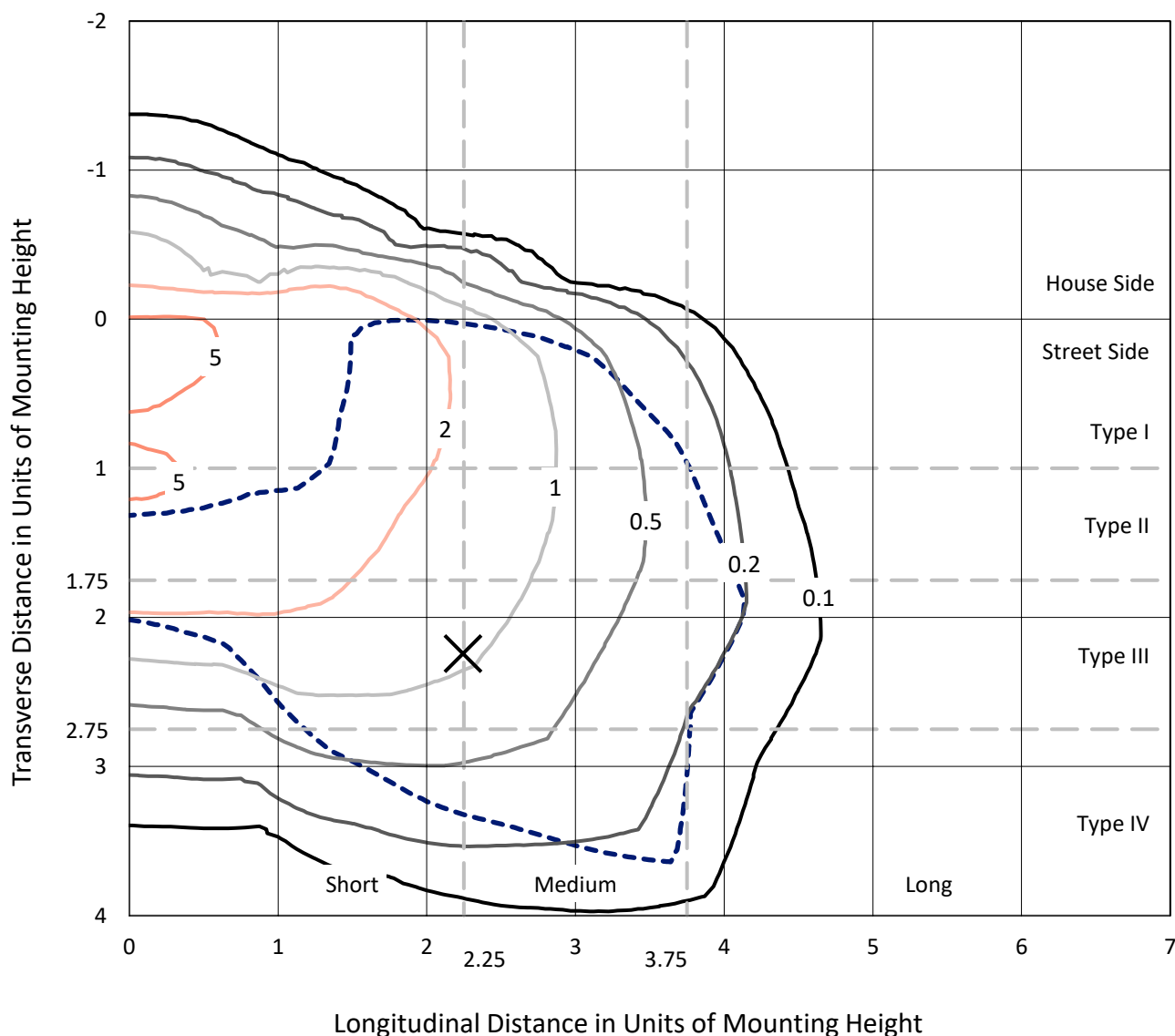


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

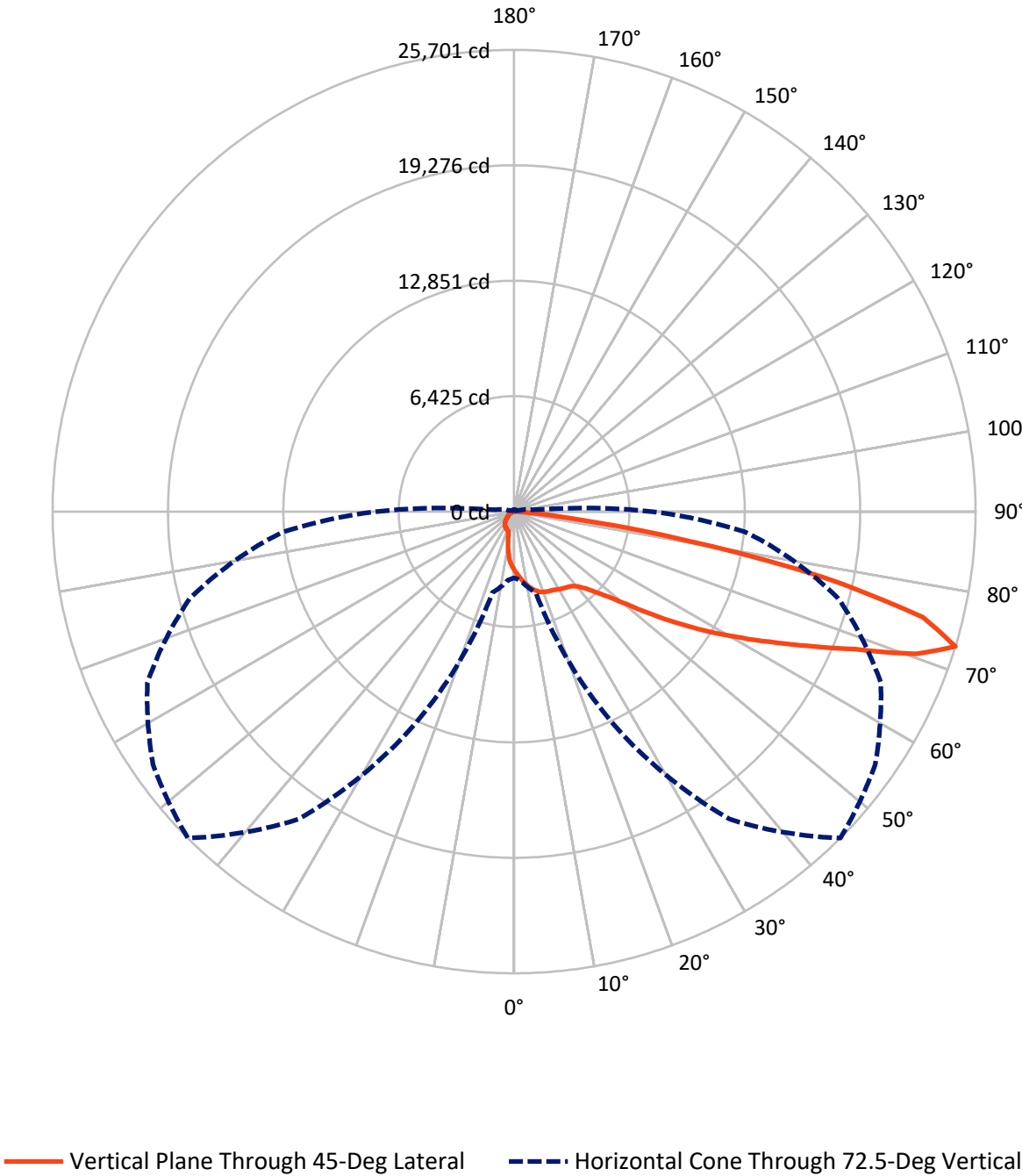


Based on 25 foot mounting height. Maximum calculated value = 7.2 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3138.4	0.0	3138.4
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	26731.1	0.0	26731.1
	% Fixture	89.5	0.0	89.5
Total	Lumens	29869.5	0.0	29869.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	308.3	1.0
10°-20°	901.1	3.0
20°-30°	1479.7	5.0
30°-40°	2098.6	7.0
40°-50°	3468.7	11.6
50°-60°	6231.1	20.9
60°-70°	8652.3	29.0
70°-80°	6276.1	21.0
80°-90°	453.7	1.5
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°	29869.5	100.0
0°-180°	29869.5	100.0

Coefficient of Utilization



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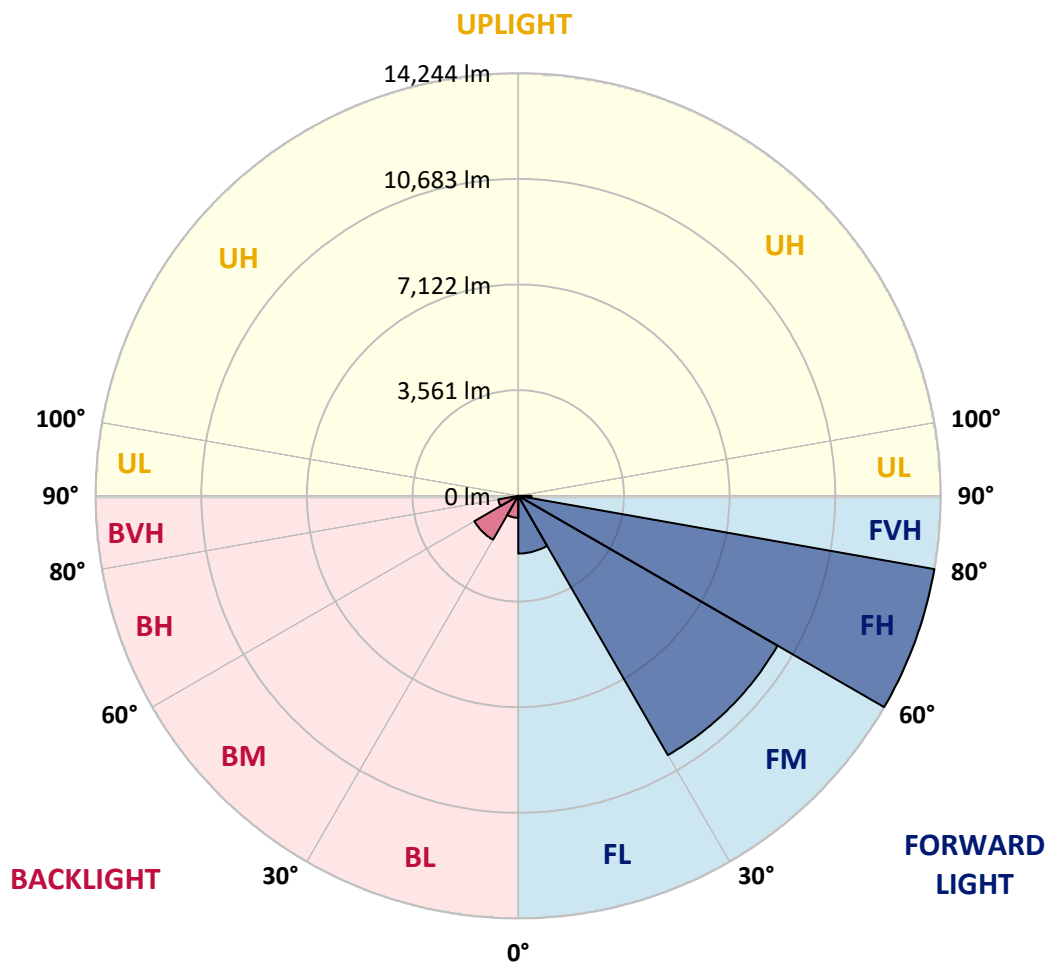
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1945.7	6.5			
FM	(30°-60°)	10091.5	33.8			
FH	(60°-80°)	14243.9	47.7			G5
FVH	(80°-90°)	449.9	1.5			G3/500
BL	(0°-30°)	743.4	2.5	B2/1000		
BM	(30°-60°)	1706.9	5.7	B2/2500		
BH	(60°-80°)	684.4	2.3	B2/1000		G2/1000
BVH	(80°-90°)	3.8	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-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	3272.3	3272.3	3272.3	3272.3	3272.3	3272.3	3272.3	3272.3	3272.3	3272.3	3272.3
2.5°	3574.0	3580.1	3576.0	3551.6	3510.8	3488.4	3476.2	3435.4	3408.8	3362.0	3313.0
5°	3902.3	3926.8	3912.4	3863.5	3786.0	3731.0	3714.7	3631.1	3555.6	3468.0	3366.1
7.5°	4250.9	4263.1	4236.6	4173.4	4069.5	3975.7	3961.4	3845.2	3724.8	3590.4	3451.7
10°	4552.6	4566.9	4526.1	4434.4	4316.2	4199.9	4179.5	4051.1	3908.3	3743.2	3565.9
12.5°	4805.4	4819.8	4766.7	4656.6	4526.1	4405.9	4385.5	4250.9	4094.0	3910.4	3690.2
15°	4997.1	5023.6	4952.3	4834.0	4693.3	4573.0	4562.8	4430.4	4277.4	4073.6	3839.0
17.5°	5109.2	5135.8	5068.4	4925.7	4805.4	4703.5	4691.3	4581.1	4438.5	4242.8	3983.8
20°	5127.6	5152.1	5080.7	4956.3	4856.4	4774.9	4768.7	4689.3	4585.2	4397.7	4140.8
22.5°	5072.5	5103.1	5037.9	4937.9	4868.6	4825.8	4817.7	4772.8	4713.7	4554.7	4287.6
25°	5015.4	5039.9	4990.9	4903.3	4866.6	4862.5	4868.6	4860.4	4848.2	4713.7	4458.9
27.5°	5011.3	5037.9	4982.8	4899.2	4878.8	4921.6	4927.8	4966.5	4976.7	4858.5	4624.0
30°	5046.1	5064.4	5011.3	4923.7	4913.5	5011.3	5013.4	5082.8	5099.1	4980.8	4787.1
32.5°	5121.4	5141.8	5088.8	4960.4	4946.1	5082.8	5088.8	5180.6	5207.1	5111.3	4958.3
35°	5298.8	5323.3	5262.1	5062.4	5011.3	5150.0	5168.4	5276.4	5329.4	5249.9	5135.8
37.5°	5741.2	5669.9	5586.4	5268.3	5160.2	5256.0	5286.6	5413.0	5506.8	5415.1	5347.7
40°	6840.1	6615.9	6354.9	5618.9	5421.1	5482.3	5506.8	5633.2	5761.6	5671.9	5639.3
42.5°	8489.6	8224.5	7804.6	6426.3	5814.6	5845.3	5863.6	5973.7	6155.1	6083.8	6091.9
45°	9959.5	9863.7	9435.5	7804.6	6550.7	6399.8	6422.2	6479.3	6746.3	6719.9	6772.9
47.5°	11089.1	11034.0	10703.7	9386.6	7794.3	7078.8	7141.9	7168.4	7553.7	7647.5	7790.2
50°	11957.5	11937.2	11641.5	10793.4	9419.2	8079.8	8102.2	8045.1	8622.1	8854.5	9125.7
52.5°	12777.1	12846.4	12628.3	12100.2	11154.3	9390.7	9386.6	9117.5	9896.3	10247.0	10709.8
55°	13517.2	13541.7	13564.1	13433.6	12899.5	10883.1	10844.4	10404.0	11374.4	11737.4	12238.9
57.5°	14212.4	14222.7	14422.5	14689.6	14716.0	12485.6	12414.3	11886.2	12989.2	13248.1	13555.9
60°	14679.3	14726.3	15148.3	15890.4	16214.6	14139.1	14100.3	13562.1	14632.5	14752.7	14695.6
62.5°	14006.5	14292.0	15356.2	16828.2	17629.5	15972.0	15953.6	15448.0	16361.4	16263.5	15774.1
65°	11337.7	11820.9	13692.6	17462.3	19018.0	18018.9	18045.4	17507.2	18137.2	17819.1	16650.8
67.5°	7930.9	8440.7	10654.8	17513.3	20569.4	20422.6	20575.5	19731.5	20023.1	19309.5	16858.8
70°	5484.4	5747.4	7188.8	16416.4	21778.5	23733.7	23729.6	22463.5	21898.7	19988.3	15798.6
72.5°	3688.2	3824.8	4668.9	13023.9	20889.5	25701.1	25582.9	24551.2	22530.7	18693.7	12907.6
75°	1555.6	1655.5	2161.1	7319.3	16526.5	23513.5	23193.4	21696.9	20019.0	14720.1	8053.2
77.5°	493.4	536.2	852.2	2619.9	9103.2	17674.4	17335.9	13549.9	13417.4	7384.5	2944.0
80°	234.4	273.2	479.1	1052.1	3582.2	9613.0	9566.0	6146.9	5771.9	1993.9	591.2
82.5°	102.0	120.3	265.1	562.7	1602.5	3429.2	3498.5	2091.8	1730.9	756.3	181.4
85°	32.6	42.8	122.3	258.9	676.9	852.2	842.0	497.4	697.3	411.8	63.2
87.5°	0.0	0.0	40.8	59.1	69.3	48.9	55.0	42.8	193.7	114.2	22.4
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°	3272.3	3272.3	3272.3	3272.3	3272.3	3272.3	3272.3	3272.3	3272.3	3272.3	3272.3
2.5°	3288.6	3255.9	3198.9	3145.8	3099.0	3052.0	3023.5	2982.7	2978.6	2978.6	2988.9
5°	3311.1	3258.0	3156.1	3048.0	2923.6	2805.4	2687.1	2573.0	2536.3	2509.7	2522.0
7.5°	3376.2	3292.6	3131.6	2925.7	2689.2	2430.3	2248.7	2053.1	1977.6	1936.8	1943.0
10°	3470.0	3355.8	3111.2	2750.4	2367.0	2014.3	1755.4	1543.3	1461.9	1427.1	1427.1
12.5°	3574.0	3433.3	3074.5	2532.2	2014.3	1592.3	1339.5	1241.6	1229.4	1229.4	1229.4
15°	3698.4	3527.1	3011.3	2275.3	1645.3	1259.9	1170.2	1174.3	1186.5	1194.7	1194.7
17.5°	3826.8	3627.1	2911.4	1987.8	1319.1	1133.5	1135.6	1141.7	1151.9	1160.1	1160.1
20°	3965.4	3726.9	2778.9	1682.0	1131.5	1096.9	1103.0	1109.2	1117.2	1121.4	1123.4
22.5°	4114.2	3820.7	2621.8	1382.3	1068.4	1066.3	1068.4	1074.4	1084.7	1084.7	1088.8
25°	4273.3	3924.7	2442.5	1164.2	1035.7	1035.7	1039.8	1043.9	1052.1	1052.1	1054.0
27.5°	4436.4	4020.5	2252.8	1050.0	1007.2	1005.1	1005.1	1011.3	1015.4	1017.3	1019.4
30°	4615.9	4132.6	2063.2	1025.5	984.7	974.6	968.4	972.5	976.6	978.7	982.7
32.5°	4799.4	4240.7	1894.0	1035.7	962.3	943.9	923.5	919.5	919.5	927.6	933.8
35°	5003.2	4358.9	1763.5	1070.4	950.1	899.1	866.5	848.2	850.1	862.4	868.5
37.5°	5247.9	4501.7	1667.8	1101.0	942.0	848.2	795.1	772.7	758.4	772.7	768.6
40°	5568.0	4711.6	1598.4	1125.4	931.7	789.0	717.7	680.9	654.5	662.6	658.6
42.5°	6038.9	5042.0	1571.9	1127.5	909.3	719.7	638.2	589.2	550.4	552.5	544.4
45°	6699.5	5563.9	1708.5	1101.0	860.4	644.2	554.5	489.3	464.8	458.7	450.6
47.5°	7604.7	6324.4	2024.5	1045.9	789.0	570.8	473.0	418.0	399.6	389.4	383.2
50°	8817.8	7301.0	2375.2	984.7	717.7	501.5	405.7	371.0	358.9	348.6	346.6
52.5°	10224.6	8291.8	2662.6	923.5	646.3	440.3	363.0	342.6	332.3	324.2	322.2
55°	11515.2	8974.8	2646.3	858.3	577.0	391.4	332.3	320.1	307.8	299.7	295.6
57.5°	12318.4	9070.6	2181.5	787.0	497.4	352.7	303.8	295.6	281.4	271.1	269.2
60°	12687.4	8524.2	1529.1	693.2	418.0	316.0	273.2	269.2	250.8	236.5	232.5
62.5°	12754.7	7508.8	1019.4	577.0	348.6	281.4	242.6	236.5	212.1	187.6	175.4
65°	12481.5	6057.2	705.4	450.6	297.7	244.7	208.0	195.8	169.2	144.7	136.6
67.5°	11617.0	4252.9	491.4	324.2	252.8	193.7	165.1	161.0	140.6	120.3	114.2
70°	10032.9	2424.1	328.2	242.6	199.8	132.5	130.5	134.6	114.2	97.9	89.7
72.5°	7692.4	1109.2	203.9	177.3	136.6	89.7	103.9	106.0	87.6	73.4	65.3
75°	4528.1	475.1	128.4	114.2	69.3	59.1	75.4	77.5	59.1	46.8	40.8
77.5°	1541.3	179.4	81.6	67.2	34.6	32.6	48.9	48.9	32.6	18.3	14.2
80°	350.7	67.2	40.8	26.5	16.3	14.2	16.3	14.2	8.2	2.0	0.0
82.5°	99.9	26.5	16.3	10.1	6.1	6.1	2.0	0.0	0.0	0.0	0.0
85°	28.5	12.2	4.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.2	2.0	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)