

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: McGRAW-EDISON

Report Number: P950432

Luminaire Tested: **GALN-SB4D-850-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P950432
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SB4D-850-U-T2U
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 5000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39533 lumens
Efficiency: N/A
Efficacy: 134.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

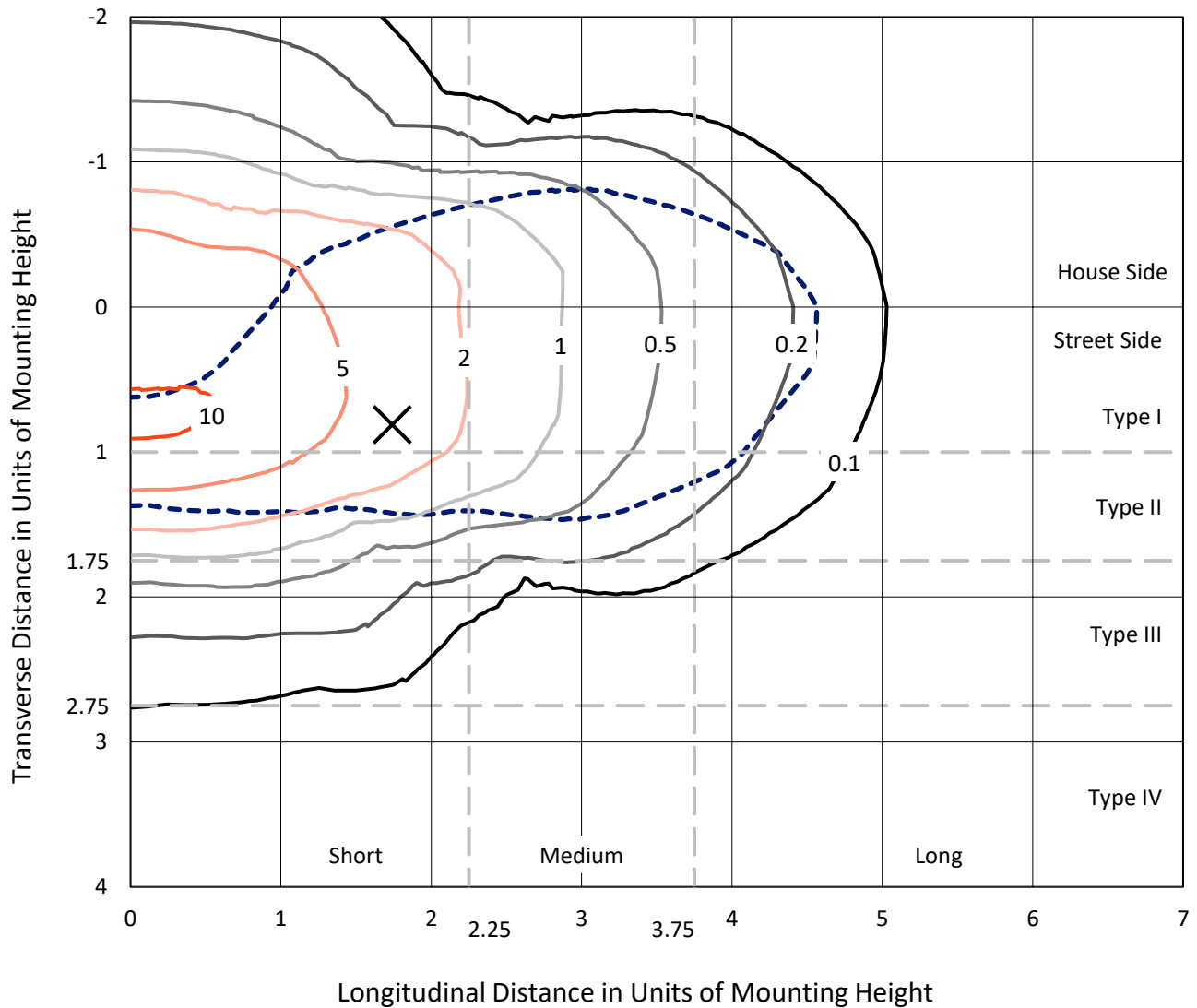
Input Watts (W): 293.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P950432
 CATALOG NUMBER: GALN-SB4D-850-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

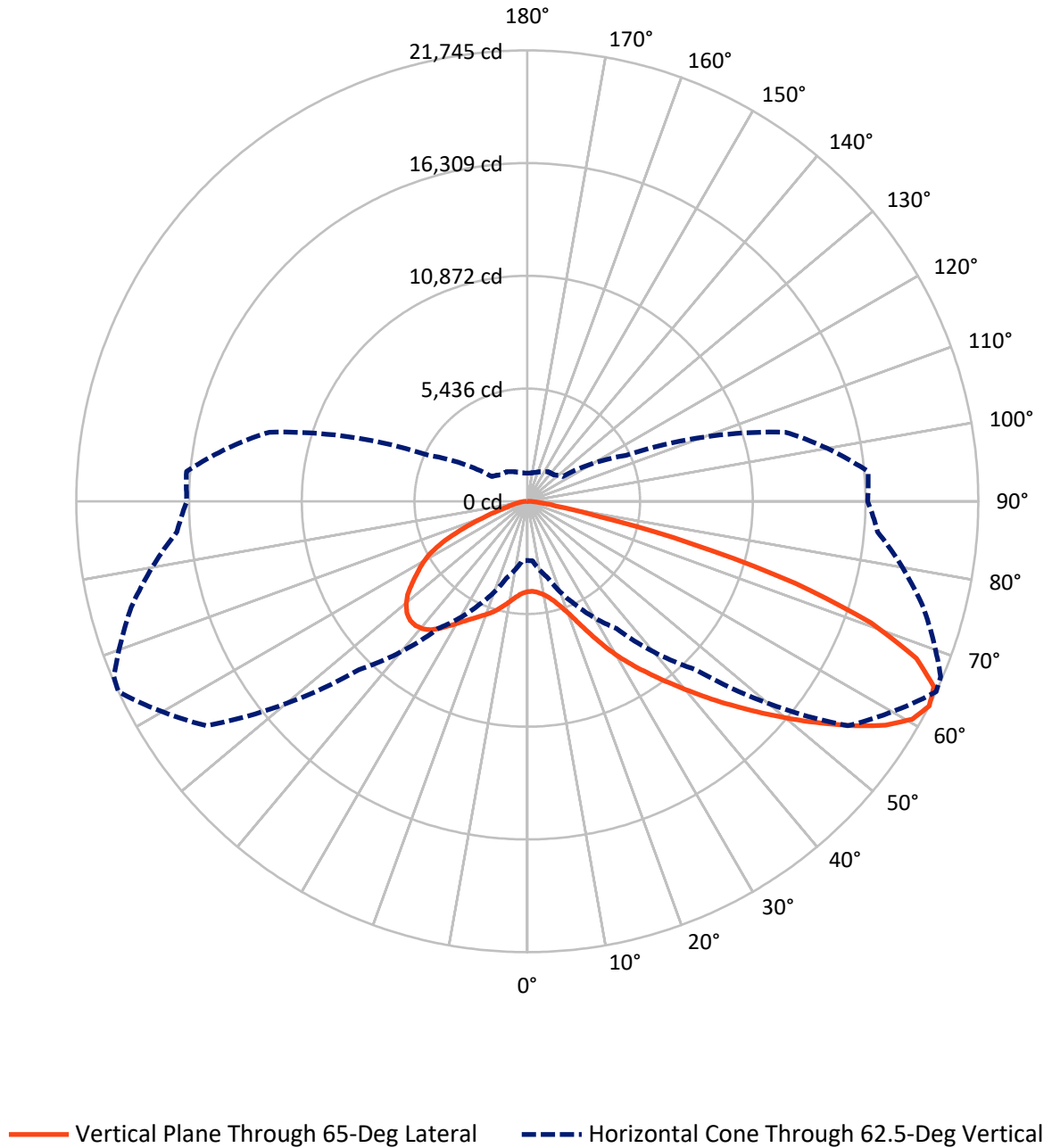
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.1 fc
 Type II - Short - N/A

REPORT NUMBER: P950432
CATALOG NUMBER: GALN-SB4D-850-U-T2U

Luminous Intensity Polar Plot



REPORT NUMBER: P950432
 CATALOG NUMBER: GALN-SB4D-850-U-T2U

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12474.9	0.0	12474.9
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	27058.1	0.0	27058.1
	% Fixture	68.4	0.0	68.4
Total	Lumens	39533.0	0.0	39533.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	434.3	1.1
10°-20°	1472.8	3.7
20°-30°	2986.3	7.6
30°-40°	5167.8	13.1
40°-50°	7820.5	19.8
50°-60°	9169.0	23.2
60°-70°	7687.1	19.4
70°-80°	4243.9	10.7
80°-90°	551.3	1.4
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°	39533.0	100.0
0°-180°	39533.0	100.0



REPORT NUMBER: P950432

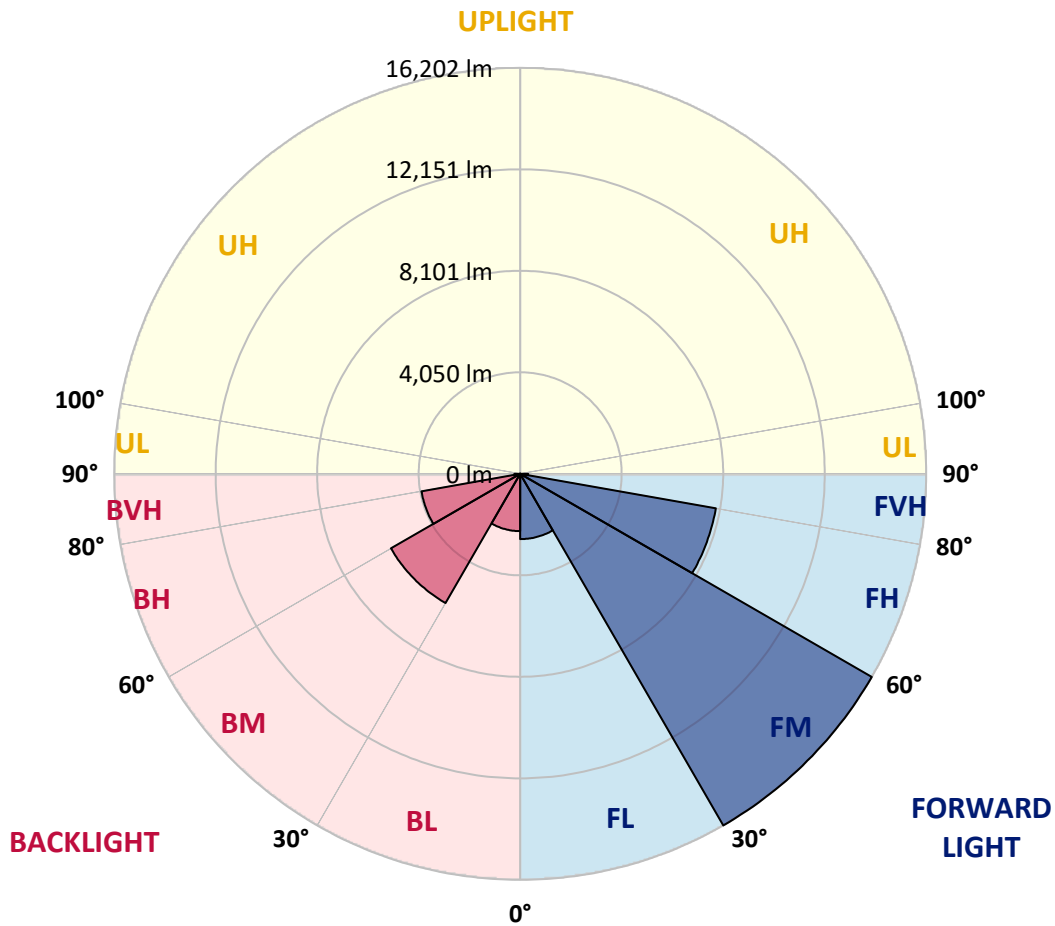
CATALOG NUMBER: GALN-SB4D-850-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2605.7	6.6			
FM (30°-60°)	16201.9	41.0			
FH (60°-80°)	7929.2	20.1			G4/12000
FVH (80°-90°)	321.3	0.8			G3/500
BL (0°-30°)	2287.7	5.8	B3/2500		
BM (30°-60°)	5955.3	15.1	B4/8500		
BH (60°-80°)	4001.8	10.1	B4/5000		G4/5000
BVH (80°-90°)	230.0	0.6			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short



REPORT NUMBER: P950432
 CATALOG NUMBER: GALN-SB4D-850-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°
0°	4356.4	4356.4	4356.4	4356.4	4356.4	4356.4	4356.4	4356.4	4356.4	4356.4
2.5°	4327.7	4315.3	4325.6	4325.6	4329.7	4327.7	4342.0	4346.1	4352.3	4364.6
5°	4284.6	4282.5	4301.0	4317.4	4333.8	4348.2	4366.6	4393.3	4397.4	4411.7
7.5°	4270.2	4257.9	4286.6	4307.1	4346.1	4381.0	4430.2	4475.3	4493.8	4499.9
10°	4381.0	4360.5	4387.1	4399.4	4432.3	4467.1	4524.5	4596.3	4616.8	4641.5
12.5°	4569.7	4547.1	4586.1	4604.5	4635.3	4666.1	4705.0	4774.8	4785.0	4830.2
15°	4828.1	4801.4	4826.0	4848.6	4899.9	4928.6	4967.6	5035.3	5035.3	5070.1
17.5°	5178.8	5144.0	5162.4	5170.6	5203.4	5246.5	5312.1	5371.6	5402.4	5390.1
20°	5701.8	5658.8	5658.8	5617.7	5605.4	5640.3	5726.4	5808.5	5841.3	5777.7
22.5°	6487.4	6425.8	6391.0	6251.5	6196.1	6200.2	6286.4	6386.9	6413.5	6300.7
25°	7486.2	7389.8	7342.6	7137.5	7012.4	6903.7	6971.4	7100.6	7137.5	6998.1
27.5°	8485.1	8491.2	8446.1	8200.0	7992.8	7793.9	7759.0	7894.4	7933.3	7775.4
30°	9885.9	9740.3	9654.1	9358.8	9063.5	8784.5	8640.9	8696.3	8706.6	8517.9
32.5°	11094.0	11057.0	10872.5	10614.0	10234.6	9797.7	9557.8	9469.6	9453.1	9184.5
35°	12470.2	12449.7	12254.8	11947.2	11537.0	10929.9	10497.1	10244.8	10224.3	9846.9
37.5°	13869.0	13869.0	13678.2	13341.9	12917.3	12158.4	11500.1	11100.1	11034.5	10542.2
40°	14984.7	14917.1	14951.9	14810.4	14324.3	13518.3	12613.8	12033.3	11945.1	11354.4
42.5°	15618.5	15596.0	15805.2	15963.1	15764.1	15120.1	13840.3	13044.5	12921.4	12248.7
45°	15760.0	15735.4	16108.7	16687.1	16966.0	16701.5	15173.4	14109.0	13959.2	13184.0
47.5°	15433.9	15384.7	15932.3	16845.0	17739.3	18204.8	16617.4	15263.7	15046.3	14094.6
50°	14453.5	14406.4	15235.0	16447.1	17999.7	19226.3	18184.3	16488.1	16155.9	15070.9
52.5°	12322.5	12345.1	13643.4	15308.8	17657.2	19862.1	19533.9	17778.2	17378.3	16069.7
55°	9598.8	9648.0	11243.7	13077.3	16287.1	19765.7	20454.8	19107.3	18709.4	17009.1
57.5°	6873.0	7090.4	8585.6	10400.7	13655.7	18237.7	20655.8	20370.7	19985.1	18034.6
60°	4454.8	4493.8	6032.0	7861.6	10398.7	15522.1	20247.7	21328.6	21027.1	19080.6
62.5°	2855.0	2881.7	3819.0	5498.8	7484.2	11483.7	18873.5	21744.9	21652.6	19771.8
65°	2098.2	2077.7	2565.8	3634.4	5041.4	7082.2	16205.1	21543.9	21726.4	20204.6
67.5°	1751.6	1722.9	1962.8	2516.6	3714.4	4022.0	11990.3	20237.4	20906.0	20155.4
70°	1595.7	1571.1	1716.7	1868.5	2898.1	2693.0	6044.4	17593.6	18623.3	19595.4
72.5°	1351.6	1308.6	1507.5	1659.3	2254.1	2065.4	2498.1	13514.2	14769.4	17800.8
75°	1048.1	1019.4	1189.6	1460.3	1694.1	1612.1	1579.3	8206.1	9576.2	13766.4
77.5°	830.7	791.7	947.6	1138.3	1523.9	1216.3	1150.6	3533.9	4891.7	8788.6
80°	625.6	590.7	719.9	900.4	1171.1	916.8	744.5	1441.9	1843.9	4452.8
82.5°	445.1	414.3	502.5	660.4	787.6	822.5	457.4	808.1	908.6	1716.7
85°	285.1	266.6	336.4	414.3	500.4	529.2	278.9	422.5	463.5	707.6
87.5°	155.9	127.2	180.5	192.8	231.8	211.3	133.3	153.8	166.1	256.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P950432
 CATALOG NUMBER: GALN-SB4D-850-U-T2U

CANDELA DISTRIBUTION (continued):

85°		90°	95°	105°	115°	125°	135°	145°	155°	165°	175°
4356.4	0°	4356.4	4356.4	4356.4	4356.4	4356.4	4356.4	4356.4	4356.4	4356.4	4356.4
4364.6	2.5°	4372.8	4378.9	4399.4	4405.6	4419.9	4438.4	4450.7	4463.0	4463.0	4475.3
4430.2	5°	4432.3	4446.6	4489.7	4512.2	4549.2	4586.1	4608.6	4635.3	4651.7	4659.9
4534.8	7.5°	4547.1	4569.7	4631.2	4670.2	4733.8	4785.0	4819.9	4856.8	4865.0	4887.6
4680.4	10°	4703.0	4729.7	4799.4	4873.2	4949.1	5012.7	5045.5	5072.2	5082.4	5086.5
4867.1	12.5°	4881.4	4920.4	5010.6	5100.9	5180.9	5236.3	5244.5	5238.3	5209.6	5185.0
5096.8	15°	5100.9	5135.8	5236.3	5334.7	5412.6	5422.9	5371.6	5338.8	5303.9	5297.8
5353.2	17.5°	5363.4	5381.9	5474.2	5570.6	5576.7	5541.9	5466.0	5435.2	5402.4	5379.8
5687.5	20°	5669.0	5662.9	5728.5	5769.5	5726.4	5619.8	5504.9	5453.7	5420.8	5394.2
6097.7	22.5°	6034.1	5986.9	5978.7	5968.5	5853.6	5630.0	5474.2	5408.5	5357.3	5320.3
6669.9	25°	6565.3	6384.8	6259.7	6190.0	5931.5	5574.7	5375.7	5230.1	5133.7	5070.1
7369.3	27.5°	7229.8	6926.3	6610.4	6440.2	5931.5	5461.9	5137.8	4901.9	4744.0	4678.4
8046.1	30°	7863.6	7545.7	7080.1	6741.7	5917.2	5277.3	4754.3	4426.1	4241.5	4175.9
8624.5	32.5°	8405.1	8058.5	7578.5	7071.9	5882.3	4977.8	4278.4	3915.4	3737.0	3659.0
9196.8	35°	8907.6	8538.4	8079.0	7434.9	5790.0	4538.9	3755.4	3478.5	3279.6	3154.5
9779.3	37.5°	9422.4	8983.5	8552.8	7763.1	5623.9	4026.2	3353.4	3117.5	2883.7	2715.5
10398.7	40°	9982.3	9457.3	9059.4	7958.0	5351.1	3538.0	3041.7	2826.3	2578.1	2399.7
11112.4	42.5°	10636.6	10025.4	9623.4	8058.5	4977.8	3191.4	2838.6	2627.4	2393.5	2247.9
11877.5	45°	11319.6	10650.9	10138.2	8056.4	4561.5	3029.4	2773.0	2563.8	2305.3	2153.6
12663.0	47.5°	12035.4	11305.2	10583.3	7925.1	4200.5	3051.9	2736.1	2426.4	2141.3	1993.6
13456.7	50°	12753.2	12021.0	11014.0	7679.0	4046.7	3002.7	2598.6	2233.6	1897.2	1763.9
14201.3	52.5°	13464.9	12782.0	11385.2	7328.3	3890.8	2820.2	2422.3	1983.3	1796.7	1704.4
14970.4	55°	14180.7	13534.7	11789.3	6817.6	3501.1	2606.8	2126.9	1889.0	1716.7	1632.6
15723.1	57.5°	14898.6	14404.3	12172.8	6306.9	3010.9	2344.3	1964.9	1774.1	1636.7	1564.9
16352.8	60°	15645.2	15399.1	12568.6	5837.2	2526.9	2007.9	1845.9	1681.8	1542.4	1462.4
16957.8	62.5°	16414.3	16494.3	12878.4	5232.2	2081.8	1802.8	1739.3	1571.1	1435.7	1359.8
17458.3	65°	17189.6	17550.6	13081.4	4393.3	1688.0	1608.0	1624.4	1450.1	1312.7	1247.0
17825.4	67.5°	17774.1	18311.5	13024.0	3324.7	1384.4	1423.4	1480.8	1322.9	1193.7	1142.4
17765.9	70°	17839.8	18221.3	12457.9	2276.6	1158.8	1242.9	1320.9	1197.8	1064.5	1027.6
16929.1	72.5°	16966.0	16990.6	10880.7	1487.0	980.4	1091.1	1152.7	1070.6	941.4	904.5
14810.4	75°	14675.0	14051.5	7988.7	980.4	820.4	937.3	994.7	937.3	812.2	820.4
11081.7	77.5°	11118.6	9951.5	4850.7	697.3	685.0	787.6	865.5	824.5	717.9	806.1
5572.6	80°	5728.5	5383.9	2163.8	521.0	541.5	629.7	711.7	658.4	568.1	541.5
1245.0	82.5°	1312.7	1526.0	853.2	373.3	391.7	453.3	543.5	494.3	408.2	344.6
518.9	85°	459.4	502.5	377.4	233.8	229.7	283.0	369.2	330.2	276.9	221.5
219.5	87.5°	145.6	190.7	141.5	94.3	98.4	127.2	170.2	155.9	129.2	84.1
0.0	90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END O

<u>180°</u>
4356.4
4475.3
4664.0
4879.4
5076.3
5185.0
5297.8
5381.9
5396.2
5332.7
5094.7
4711.2
4214.8
3698.0
3195.5
2760.7
2434.6
2276.6
2178.2
2014.1
1772.1
1704.4
1624.4
1552.6
1456.2
1357.8
1245.0
1144.5
1029.6
902.4
791.7
709.7
494.3
340.5
233.8
88.2
0.0

F REPORT)