

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: EPHESUS

Report Number: P413440 (CONVERTED FROM TYPE C PHOTOMETRY)

Luminaire Tested: **EPH-08-0680R-40-70-1S-HEG**

Issue Date: 10/30/2020

Test Information

Test Method: LM-79-08
Report Number: P413440 (CONVERTED FROM TYPE C PHOTOMETRY)
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1912-617-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/30/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-08-0680R-40-70-1S-HEG
Description: EPHESUS LUMASPORT 8 LUMINAIRE
(8) 4000K, 70 CRI LEDS AND 1S BEAM SHAPE
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

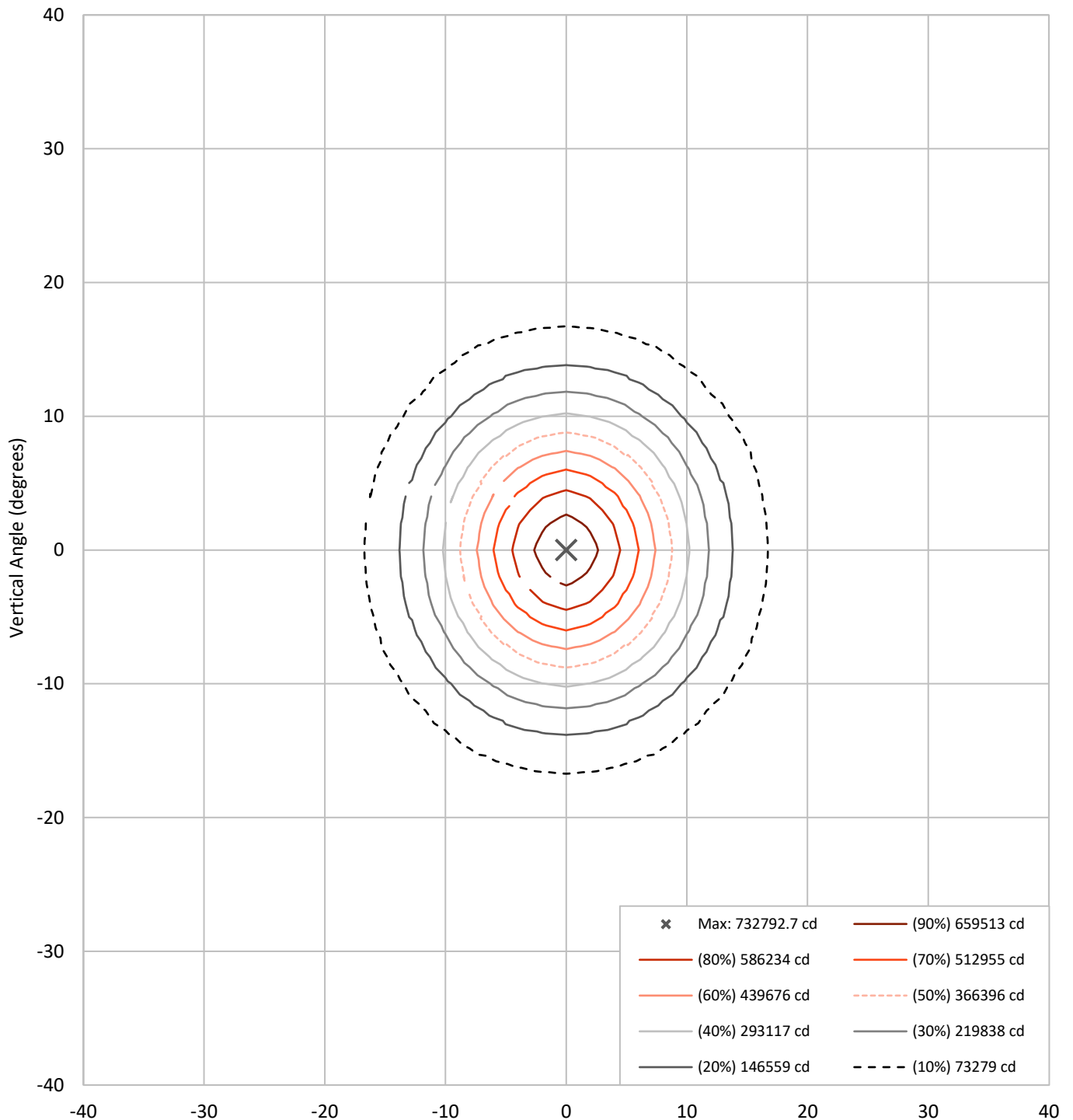
Summary

Lumens per Lamp:	N/A	NEMA Type:	3H x 3V
Luminaire Lumens:	89260.2 lumens	Max Intensity:	732792.7 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	124.0 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')		
Beam Angle (50%):	17.6°H x 17.6°V	Field Angle (10%):	33.3°H x 33.3°V
Beam Lumens:	32487.3 lumens	Field Lumens:	72830.9 lumens
Beam Efficiency:	36.4%	Field Efficiency:	81.6%

Input Watts (W): 720
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: 25 FT

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Iso-Candela Plot





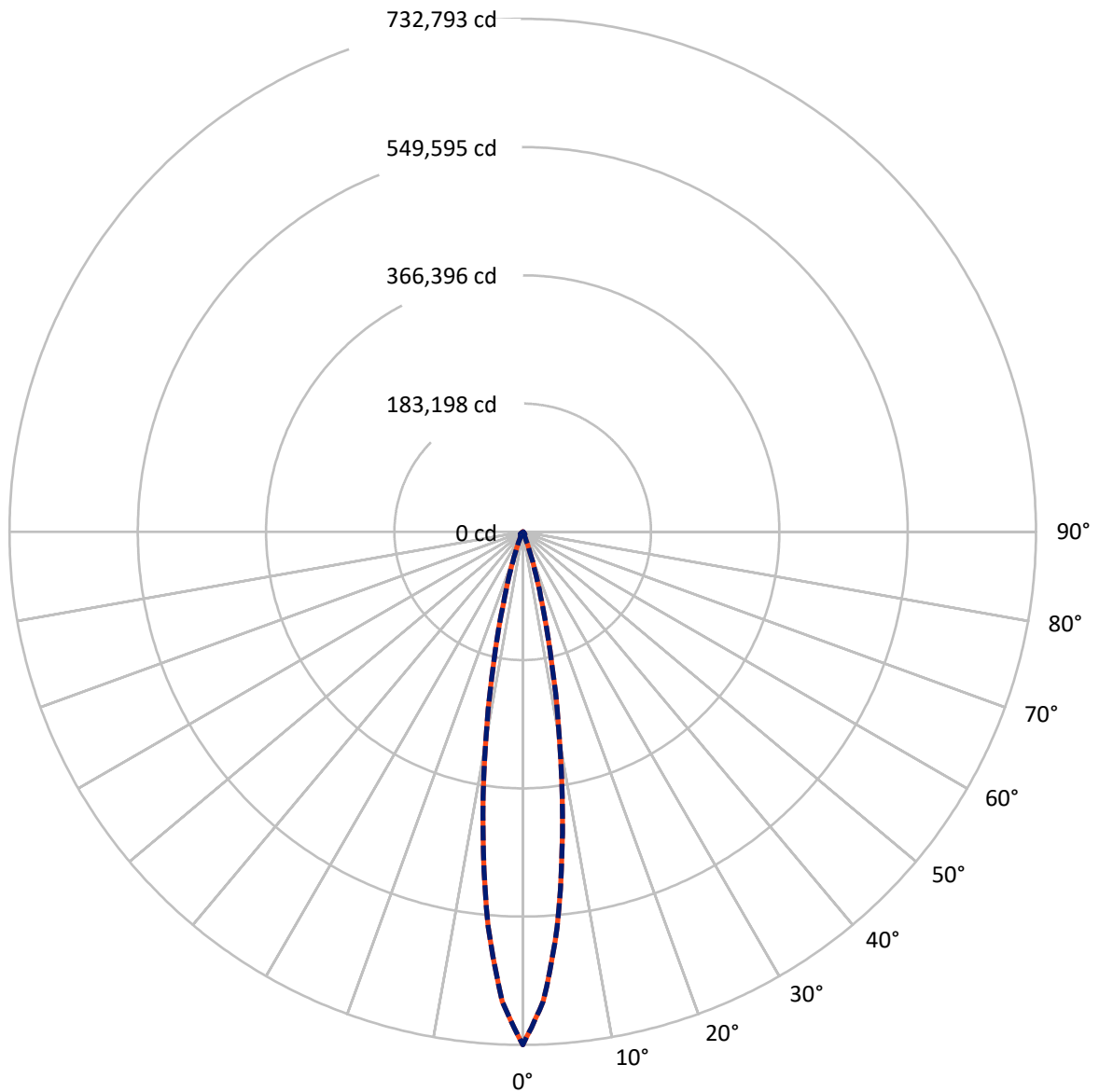
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Lumen Table

90	0.3	1.4	3.4	7.4	9.7	7.4	3.4	1.4	0.3							
80	0.6	0.6	1.5	4.8	9.8	15.2	19.8	22.3	22.3	19.8	15.2	9.8	4.8	1.5	0.6	0.6
70	1.0	1.2	5.8	14.1	24.5	32.7	38.0	40.9	40.9	38.0	32.7	24.5	14.1	5.8	1.2	1.0
60	2.0	3.0	11.6	24.1	34.7	61.5	99.2	119.5	119.5	99.2	61.5	34.7	24.1	11.6	3.0	2.0
50	2.6	5.2	17.3	30.0	75.9	129.6	138.5	135.8	135.8	138.5	129.6	75.9	30.0	17.3	5.2	2.6
40	2.0	7.3	20.8	48.6	117.2	122.1	128.9	226.6	226.6	128.9	122.1	117.2	48.6	20.8	7.3	2.0
30	2.6	8.9	22.7	73.7	117.4	121.1	783.6	3116.3	3116.3	783.6	121.1	117.4	73.7	22.7	8.9	2.6
20	2.6	9.7	23.7	85.8	111.3	208.5	3041.5	12779.9	12779.9	3041.5	208.5	111.3	85.8	23.7	9.7	2.6
10	2.0	9.7	23.7	85.8	111.3	208.5	3041.5	12779.9	12779.9	3041.5	208.5	111.3	85.8	23.7	9.7	2.0
0	2.0	8.9	22.7	73.7	117.4	121.1	783.6	3116.3	3116.3	783.6	121.1	117.4	73.7	22.7	8.9	2.0
-10	2.0	7.3	20.8	48.6	117.2	122.1	128.9	226.6	226.6	128.9	122.1	117.2	48.6	20.8	7.3	2.0
-20	1.0	5.2	17.3	30.0	75.9	129.6	138.5	135.8	135.8	138.5	129.6	75.9	30.0	17.3	5.2	1.0
-30	1.0	3.0	11.6	24.1	34.7	61.5	99.2	119.5	119.5	99.2	61.5	34.7	24.1	11.6	3.0	1.0
-40	0.6	1.2	5.8	14.1	24.5	32.7	38.0	40.9	40.9	38.0	32.7	24.5	14.1	5.8	1.2	0.6
-50	0.6	0.6	1.5	4.8	9.8	15.2	19.8	22.3	22.3	19.8	15.2	9.8	4.8	1.5	0.6	0.6
-60	0.3	1.4	3.4	7.4	9.7	7.4	3.4	1.4	0.3							
-70	0.3	1.4	3.4	7.4	9.7	7.4	3.4	1.4	0.3							
-80	0.3	1.4	3.4	7.4	9.7	7.4	3.4	1.4	0.3							
-90	0.3	1.4	3.4	7.4	9.7	7.4	3.4	1.4	0.3							

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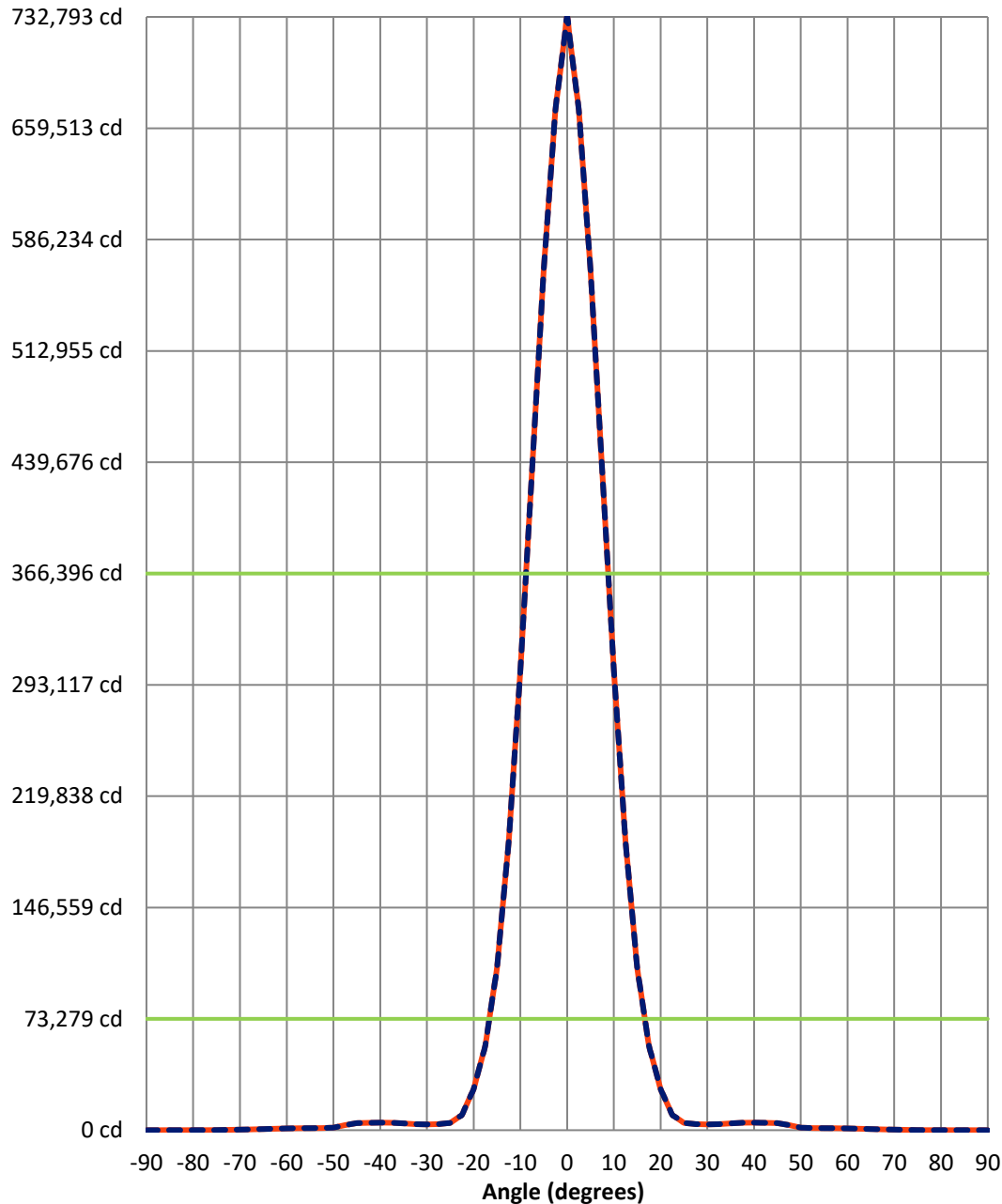
Luminous Intensity Polar Plot



— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:
 H Angle: 17.6°
 V Angle: 17.6°
 Lumens: 32487.3
 Efficiency: 36.4%

Field:
 H Angle: 33.3°
 V Angle: 33.3°
 Lumens: 72830.9
 Efficiency: 81.6%

Spill:
 Lumens: 16429.3
 Efficiency: 18.4%

— Vertical Distribution through 0-Deg
 - - Horizontal Distribution through 0-Deg



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FIELD
 BEAM

CANDELA DISTRIBUTION:

	-90°	-87.5°	-85°	-82.5°	-80°	-77.5°	-75°	-72.5°	-70°	-67.5°	-65°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	4.9
85°	0.0	1.0	2.0	3.1	4.1	5.1	6.0	7.0	8.0	8.9	9.9
82.5°	0.0	1.5	3.1	4.6	6.1	7.6	9.1	10.5	12.3	15.3	18.3
80°	0.0	2.0	4.1	6.1	8.1	10.1	12.5	16.6	20.7	24.8	28.7
77.5°	0.0	2.5	5.1	7.6	10.1	13.5	18.8	24.0	29.1	34.1	34.8
75°	0.0	3.0	6.0	9.1	12.5	18.8	25.1	31.3	36.0	31.6	27.2
72.5°	0.0	3.5	7.0	10.5	16.6	24.0	31.3	35.2	30.0	24.8	19.8
70°	0.0	4.0	8.0	12.3	20.7	29.1	36.0	30.0	24.0	18.6	29.6
67.5°	0.0	4.5	8.9	15.3	24.8	34.1	31.6	24.8	18.6	31.2	43.5
65°	0.0	4.9	9.9	18.3	28.7	34.8	27.2	19.8	29.6	43.5	51.7
62.5°	0.0	5.4	10.8	21.2	32.6	31.2	23.0	25.0	40.4	52.3	46.5
60°	0.0	5.8	11.7	24.1	36.4	27.7	18.8	34.3	51.1	47.7	41.5
57.5°	0.0	6.3	13.5	26.9	34.0	24.3	25.2	43.4	50.1	43.3	50.3
55°	0.0	6.7	15.3	29.6	31.4	21.0	32.8	52.2	46.2	42.9	65.3
52.5°	0.0	7.1	17.1	32.2	28.8	19.3	40.2	50.3	42.5	56.1	80.0
50°	0.0	7.5	18.8	34.7	26.3	25.2	47.3	47.1	43.2	68.9	124.1
47.5°	0.0	7.9	20.4	36.2	23.9	31.0	52.8	44.0	54.2	81.2	170.3
45°	0.0	8.3	22.0	34.4	21.6	36.5	50.3	41.1	64.8	120.6	214.9
42.5°	0.0	8.6	23.5	32.8	19.4	41.8	47.9	45.0	74.9	159.1	260.5
40°	0.0	9.0	24.9	31.2	20.3	46.8	45.6	53.5	92.1	195.9	304.5
37.5°	0.0	9.3	26.3	29.7	24.1	51.6	43.4	61.6	123.1	231.6	346.5
35°	0.0	9.6	27.6	28.3	27.8	52.1	41.3	69.2	152.5	267.3	386.2
32.5°	0.0	9.9	28.8	26.9	31.2	50.4	41.7	76.4	180.2	300.9	423.3
30°	0.0	10.1	29.9	25.7	34.3	48.9	47.4	86.8	206.1	332.4	458.1
27.5°	0.0	10.4	31.0	24.5	37.3	47.5	52.7	107.7	230.8	361.7	490.5
25°	0.0	10.6	31.9	23.5	40.0	46.2	57.6	127.0	254.6	388.5	521.0
22.5°	0.0	10.8	32.8	22.5	42.5	45.0	62.1	144.6	276.4	412.8	562.4
20°	0.0	11.0	33.6	21.6	44.7	44.0	66.1	160.5	296.0	434.8	599.9
17.5°	0.0	11.2	34.3	20.9	46.7	43.0	69.7	174.6	313.4	454.3	633.2
15°	0.0	11.3	34.9	20.2	48.4	42.2	72.8	186.9	328.6	471.4	662.2
12.5°	0.0	11.4	35.4	19.6	49.9	41.5	75.4	197.3	341.5	485.9	686.9
10°	0.0	11.5	35.8	19.1	51.1	40.9	77.6	205.9	352.1	497.8	707.3
7.5°	0.0	11.6	36.2	18.8	52.0	40.5	79.3	212.6	360.4	507.1	723.2
5°	0.0	11.7	36.4	18.5	52.7	40.2	80.5	217.4	366.3	513.8	734.6
2.5°	0.0	11.7	36.6	18.4	53.1	40.0	81.3	220.2	369.9	517.8	741.4
0°	0.0	11.7	36.6	18.3	53.2	39.9	81.5	221.2	371.1	519.1	743.7
-2.5°	0.0	11.7	36.6	18.4	53.1	40.0	81.3	220.2	369.9	517.8	741.4
-5°	0.0	11.7	36.4	18.5	52.7	40.2	80.5	217.4	366.3	513.8	734.6
-7.5°	0.0	11.6	36.2	18.8	52.0	40.5	79.3	212.6	360.4	507.1	723.2
-10°	0.0	11.5	35.8	19.1	51.1	40.9	77.6	205.9	352.1	497.8	707.3
-12.5°	0.0	11.4	35.4	19.6	49.9	41.5	75.4	197.3	341.5	485.9	686.9
-15°	0.0	11.3	34.9	20.2	48.4	42.2	72.8	186.9	328.6	471.4	662.2
-17.5°	0.0	11.2	34.3	20.9	46.7	43.0	69.7	174.6	313.4	454.3	633.2
-20°	0.0	11.0	33.6	21.6	44.7	44.0	66.1	160.5	296.0	434.8	599.9



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 CATALOG NUMBER: EPH-08-0680R-40-70-1S-HEG

CANDELA DISTRIBUTION (continued):

	-90°	-87.5°	-85°	-82.5°	-80°	-77.5°	-75°	-72.5°	-70°	-67.5°	-65°
-22.5°	0.0	10.8	32.8	22.5	42.5	45.0	62.1	144.6	276.4	412.8	562.4
-25°	0.0	10.6	31.9	23.5	40.0	46.2	57.6	127.0	254.6	388.5	521.0
-27.5°	0.0	10.4	31.0	24.5	37.3	47.5	52.7	107.7	230.8	361.7	490.5
-30°	0.0	10.1	29.9	25.7	34.3	48.9	47.4	86.8	206.1	332.4	458.1
-32.5°	0.0	9.9	28.8	26.9	31.2	50.4	41.7	76.4	180.2	300.9	423.3
-35°	0.0	9.6	27.6	28.3	27.8	52.1	41.3	69.2	152.5	267.3	386.2
-37.5°	0.0	9.3	26.3	29.7	24.1	51.6	43.4	61.6	123.1	231.6	346.5
-40°	0.0	9.0	24.9	31.2	20.3	46.8	45.6	53.5	92.1	195.9	304.5
-42.5°	0.0	8.6	23.5	32.8	19.4	41.8	47.9	45.0	74.9	159.1	260.5
-45°	0.0	8.3	22.0	34.4	21.6	36.5	50.3	41.1	64.8	120.6	214.9
-47.5°	0.0	7.9	20.4	36.2	23.9	31.0	52.8	44.0	54.2	81.2	170.3
-50°	0.0	7.5	18.8	34.7	26.3	25.2	47.3	47.1	43.2	68.9	124.1
-52.5°	0.0	7.1	17.1	32.2	28.8	19.3	40.2	50.3	42.5	56.1	80.0
-55°	0.0	6.7	15.3	29.6	31.4	21.0	32.8	52.2	46.2	42.9	65.3
-57.5°	0.0	6.3	13.5	26.9	34.0	24.3	25.2	43.4	50.1	43.3	50.3
-60°	0.0	5.8	11.7	24.1	36.4	27.7	18.8	34.3	51.1	47.7	41.5
-62.5°	0.0	5.4	10.8	21.2	32.6	31.2	23.0	25.0	40.4	52.3	46.5
-65°	0.0	4.9	9.9	18.3	28.7	34.8	27.2	19.8	29.6	43.5	51.7
-67.5°	0.0	4.5	8.9	15.3	24.8	34.1	31.6	24.8	18.6	31.2	43.5
-70°	0.0	4.0	8.0	12.3	20.7	29.1	36.0	30.0	24.0	18.6	29.6
-72.5°	0.0	3.5	7.0	10.5	16.6	24.0	31.3	35.2	30.0	24.8	19.8
-75°	0.0	3.0	6.0	9.1	12.5	18.8	25.1	31.3	36.0	31.6	27.2
-77.5°	0.0	2.5	5.1	7.6	10.1	13.5	18.8	24.0	29.1	34.1	34.8
-80°	0.0	2.0	4.1	6.1	8.1	10.1	12.5	16.6	20.7	24.8	28.7
-82.5°	0.0	1.5	3.1	4.6	6.1	7.6	9.1	10.5	12.3	15.3	18.3
-85°	0.0	1.0	2.0	3.1	4.1	5.1	6.0	7.0	8.0	8.9	9.9
-87.5°	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	4.9
-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):

	-62.5°	-60°	-57.5°	-55°	-52.5°	-50°	-47.5°	-45°	-42.5°	-40°	-37.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.4	5.8	6.3	6.7	7.1	7.5	7.9	8.3	8.6	9.0	9.3
85°	10.8	11.7	13.5	15.3	17.1	18.8	20.4	22.0	23.5	24.9	26.3
82.5°	21.2	24.1	26.9	29.6	32.2	34.7	36.2	34.4	32.8	31.2	29.7
80°	32.6	36.4	34.0	31.4	28.8	26.3	23.9	21.6	19.4	20.3	24.1
77.5°	31.2	27.7	24.3	21.0	19.3	25.2	31.0	36.5	41.8	46.8	51.6
75°	23.0	18.8	25.2	32.8	40.2	47.3	52.8	50.3	47.9	45.6	43.4
72.5°	25.0	34.3	43.4	52.2	50.3	47.1	44.0	41.1	45.0	53.5	61.6
70°	40.4	51.1	50.1	46.2	42.5	43.2	54.2	64.8	74.9	92.1	123.1
67.5°	52.3	47.7	43.3	42.9	56.1	68.9	81.2	120.6	159.1	195.9	231.6
65°	46.5	41.5	50.3	65.3	80.0	124.1	170.3	214.9	260.5	304.5	346.5
62.5°	40.9	54.0	70.9	101.5	155.6	208.1	261.8	314.5	365.3	413.4	459.3
60°	54.0	72.8	114.1	174.6	234.4	296.0	355.7	412.8	467.7	521.0	597.3
57.5°	70.9	114.1	180.9	248.2	316.7	383.2	447.1	509.0	594.3	681.3	763.2
55°	101.5	174.6	248.2	323.6	396.9	467.9	546.0	647.3	745.1	833.7	918.5
52.5°	155.6	234.4	316.7	396.9	474.8	567.2	679.5	785.7	884.7	978.9	1066.1
50°	208.1	296.0	383.2	467.9	567.2	690.2	806.1	915.6	1018.5	1116.0	1192.5
47.5°	261.8	355.7	447.1	546.0	679.5	806.1	926.0	1038.5	1146.3	1220.1	1287.9
45°	314.5	412.8	509.0	647.3	785.7	915.6	1038.5	1156.4	1234.0	1297.9	1320.9
42.5°	365.3	467.7	594.3	745.1	884.7	1018.5	1146.3	1234.0	1300.2	1325.4	1355.1
40°	413.4	521.0	681.3	833.7	978.9	1116.0	1220.1	1297.9	1325.4	1358.3	1394.1
37.5°	459.3	597.3	763.2	918.5	1066.1	1192.5	1287.9	1320.9	1355.1	1394.1	1554.3
35°	502.8	669.9	837.7	997.2	1149.3	1253.1	1311.8	1345.5	1387.6	1539.6	2019.1
32.5°	556.8	738.5	908.2	1070.2	1205.1	1298.5	1331.4	1374.6	1495.7	1825.5	3011.3
30°	615.3	799.4	973.6	1139.0	1255.5	1315.7	1355.4	1423.4	1625.2	2715.2	3817.2
27.5°	669.9	855.9	1032.6	1188.1	1295.9	1331.9	1379.5	1537.3	2228.6	3508.6	4506.3
25°	720.3	908.2	1087.2	1228.5	1309.8	1351.1	1422.8	1643.6	2964.0	4113.6	4726.4
22.5°	765.0	956.0	1137.2	1265.5	1322.6	1370.3	1513.8	2193.1	3576.2	4652.8	4819.2
20°	804.2	997.2	1174.1	1294.8	1334.2	1387.7	1596.6	2769.6	4053.4	4731.9	4882.9
17.5°	839.0	1034.0	1201.5	1304.3	1347.8	1428.4	1736.5	3287.3	4482.9	4803.3	4930.5
15°	869.5	1066.1	1225.4	1312.6	1360.4	1488.5	2156.7	3651.7	4681.5	4859.5	4970.6
12.5°	895.4	1093.5	1245.8	1319.7	1371.1	1539.9	2516.7	3951.8	4731.6	4893.0	4945.5
10°	916.8	1116.0	1262.6	1325.5	1380.0	1582.4	2814.4	4200.2	4773.1	4920.9	4924.6
7.5°	933.5	1133.6	1275.8	1330.1	1386.9	1615.7	3048.0	4395.3	4805.8	4942.8	4908.1
5°	945.4	1146.3	1285.2	1333.4	1391.9	1639.6	3215.9	4535.7	4829.3	4958.6	4896.2
2.5°	952.6	1153.9	1290.9	1335.3	1394.9	1654.0	3317.1	4620.4	4843.6	4968.2	4889.0
0°	955.0	1156.4	1292.8	1336.0	1395.9	1658.8	3350.9	4648.7	4848.3	4971.4	4886.6
-2.5°	952.6	1153.9	1290.9	1335.3	1394.9	1654.0	3317.1	4620.4	4843.6	4968.2	4889.0
-5°	945.4	1146.3	1285.2	1333.4	1391.9	1639.6	3215.9	4535.7	4829.3	4958.6	4896.2
-7.5°	933.5	1133.6	1275.8	1330.1	1386.9	1615.7	3048.0	4395.3	4805.8	4942.8	4908.1
-10°	916.8	1116.0	1262.6	1325.5	1380.0	1582.4	2814.4	4200.2	4773.1	4920.9	4924.6
-12.5°	895.4	1093.5	1245.8	1319.7	1371.1	1539.9	2516.7	3951.8	4731.6	4893.0	4945.5
-15°	869.5	1066.1	1225.4	1312.6	1360.4	1488.5	2156.7	3651.7	4681.5	4859.5	4970.6
-17.5°	839.0	1034.0	1201.5	1304.3	1347.8	1428.4	1736.5	3287.3	4482.9	4803.3	4930.5
-20°	804.2	997.2	1174.1	1294.8	1334.2	1387.7	1596.6	2769.6	4053.4	4731.9	4882.9



REPORT NUMBER: P413440 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: EPH-08-0680R-40-70-1S-HEG

CANDELA DISTRIBUTION (continued):

	-62.5°	-60°	-57.5°	-55°	-52.5°	-50°	-47.5°	-45°	-42.5°	-40°	-37.5°
-22.5°	765.0	956.0	1137.2	1265.5	1322.6	1370.3	1513.8	2193.1	3576.2	4652.8	4819.2
-25°	720.3	908.2	1087.2	1228.5	1309.8	1351.1	1422.8	1643.6	2964.0	4113.6	4726.4
-27.5°	669.9	855.9	1032.6	1188.1	1295.9	1331.9	1379.5	1537.3	2228.6	3508.6	4506.3
-30°	615.3	799.4	973.6	1139.0	1255.5	1315.7	1355.4	1423.4	1625.2	2715.2	3817.2
-32.5°	556.8	738.5	908.2	1070.2	1205.1	1298.5	1331.4	1374.6	1495.7	1825.5	3011.3
-35°	502.8	669.9	837.7	997.2	1149.3	1253.1	1311.8	1345.5	1387.6	1539.6	2019.1
-37.5°	459.3	597.3	763.2	918.5	1066.1	1192.5	1287.9	1320.9	1355.1	1394.1	1554.3
-40°	413.4	521.0	681.3	833.7	978.9	1116.0	1220.1	1297.9	1325.4	1358.3	1394.1
-42.5°	365.3	467.7	594.3	745.1	884.7	1018.5	1146.3	1234.0	1300.2	1325.4	1355.1
-45°	314.5	412.8	509.0	647.3	785.7	915.6	1038.5	1156.4	1234.0	1297.9	1320.9
-47.5°	261.8	355.7	447.1	546.0	679.5	806.1	926.0	1038.5	1146.3	1220.1	1287.9
-50°	208.1	296.0	383.2	467.9	567.2	690.2	806.1	915.6	1018.5	1116.0	1192.5
-52.5°	155.6	234.4	316.7	396.9	474.8	567.2	679.5	785.7	884.7	978.9	1066.1
-55°	101.5	174.6	248.2	323.6	396.9	467.9	546.0	647.3	745.1	833.7	918.5
-57.5°	70.9	114.1	180.9	248.2	316.7	383.2	447.1	509.0	594.3	681.3	763.2
-60°	54.0	72.8	114.1	174.6	234.4	296.0	355.7	412.8	467.7	521.0	597.3
-62.5°	40.9	54.0	70.9	101.5	155.6	208.1	261.8	314.5	365.3	413.4	459.3
-65°	46.5	41.5	50.3	65.3	80.0	124.1	170.3	214.9	260.5	304.5	346.5
-67.5°	52.3	47.7	43.3	42.9	56.1	68.9	81.2	120.6	159.1	195.9	231.6
-70°	40.4	51.1	50.1	46.2	42.5	43.2	54.2	64.8	74.9	92.1	123.1
-72.5°	25.0	34.3	43.4	52.2	50.3	47.1	44.0	41.1	45.0	53.5	61.6
-75°	23.0	18.8	25.2	32.8	40.2	47.3	52.8	50.3	47.9	45.6	43.4
-77.5°	31.2	27.7	24.3	21.0	19.3	25.2	31.0	36.5	41.8	46.8	51.6
-80°	32.6	36.4	34.0	31.4	28.8	26.3	23.9	21.6	19.4	20.3	24.1
-82.5°	21.2	24.1	26.9	29.6	32.2	34.7	36.2	34.4	32.8	31.2	29.7
-85°	10.8	11.7	13.5	15.3	17.1	18.8	20.4	22.0	23.5	24.9	26.3
-87.5°	5.4	5.8	6.3	6.7	7.1	7.5	7.9	8.3	8.6	9.0	9.3
-90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P413440 (CONVERTED FROM TYPE C PHOTOMETRY)
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CANDELA DISTRIBUTION (continued):

	-35°	-32.5°	-30°	-27.5°	-25°	-22.5°	-20°	-17.5°	-15°	-12.5°	-10°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.6	9.9	10.1	10.4	10.6	10.8	11.0	11.2	11.3	11.4	11.5
85°	27.6	28.8	29.9	31.0	31.9	32.8	33.6	34.3	34.9	35.4	35.8
82.5°	28.3	26.9	25.7	24.5	23.5	22.5	21.6	20.9	20.2	19.6	19.1
80°	27.8	31.2	34.3	37.3	40.0	42.5	44.7	46.7	48.4	49.9	51.1
77.5°	52.1	50.4	48.9	47.5	46.2	45.0	44.0	43.0	42.2	41.5	40.9
75°	41.3	41.7	47.4	52.7	57.6	62.1	66.1	69.7	72.8	75.4	77.6
72.5°	69.2	76.4	86.8	107.7	127.0	144.6	160.5	174.6	186.9	197.3	205.9
70°	152.5	180.2	206.1	230.8	254.6	276.4	296.0	313.4	328.6	341.5	352.1
67.5°	267.3	300.9	332.4	361.7	388.5	412.8	434.8	454.3	471.4	485.9	497.8
65°	386.2	423.3	458.1	490.5	521.0	562.4	599.9	633.2	662.2	686.9	707.3
62.5°	502.8	556.8	615.3	669.9	720.3	765.0	804.2	839.0	869.5	895.4	916.8
60°	669.9	738.5	799.4	855.9	908.2	956.0	997.2	1034.0	1066.1	1093.5	1116.0
57.5°	837.7	908.2	973.6	1032.6	1087.2	1137.2	1174.1	1201.5	1225.4	1245.8	1262.6
55°	997.2	1070.2	1139.0	1188.1	1228.5	1265.5	1294.8	1304.3	1312.6	1319.7	1325.5
52.5°	1149.3	1205.1	1255.5	1295.9	1309.8	1322.6	1334.2	1347.8	1360.4	1371.1	1380.0
50°	1253.1	1298.5	1315.7	1331.9	1351.1	1370.3	1387.7	1428.4	1488.5	1539.9	1582.4
47.5°	1311.8	1331.4	1355.4	1379.5	1422.8	1513.8	1596.6	1736.5	2156.7	2516.7	2814.4
45°	1345.5	1374.6	1423.4	1537.3	1643.6	2193.1	2769.6	3287.3	3651.7	3951.8	4200.2
42.5°	1387.6	1495.7	1625.2	2228.6	2964.0	3576.2	4053.4	4482.9	4681.5	4731.6	4773.1
40°	1539.6	1825.5	2715.2	3508.6	4113.6	4652.8	4731.9	4803.3	4859.5	4893.0	4920.9
37.5°	2019.1	3011.3	3817.2	4506.3	4726.4	4819.2	4882.9	4930.5	4970.6	4945.5	4924.6
35°	3110.7	3973.2	4663.6	4776.6	4869.8	4931.2	4960.2	4924.8	4893.3	4789.6	4682.0
32.5°	3973.2	4676.0	4802.0	4893.9	4964.1	4931.1	4889.2	4718.5	4557.3	4398.7	4249.7
30°	4663.6	4802.0	4902.0	4964.9	4913.4	4784.0	4570.8	4346.3	4124.3	3960.8	3904.8
27.5°	4776.6	4893.9	4964.9	4907.4	4725.5	4478.7	4187.9	3957.3	3874.6	3802.0	3873.7
25°	4869.8	4964.1	4913.4	4725.5	4439.9	4107.2	3914.2	3815.0	3892.1	3985.8	4228.4
22.5°	4931.2	4931.1	4784.0	4478.7	4107.2	3899.6	3822.0	3948.5	4222.8	4617.5	5817.9
20°	4960.2	4889.2	4570.8	4187.9	3914.2	3822.0	3967.6	4377.4	5192.0	8060.5	11628.1
17.5°	4924.8	4718.5	4346.3	3957.3	3815.0	3948.5	4377.4	5740.3	9223.1	17604.8	26555.4
15°	4893.3	4557.3	4124.3	3874.6	3892.1	4222.8	5192.0	9223.1	19654.9	33583.3	50433.1
12.5°	4789.6	4398.7	3960.8	3802.0	3985.8	4617.5	8060.5	17604.8	33583.3	54525.5	87267.1
10°	4682.0	4249.7	3904.8	3873.7	4228.4	5817.9	11628.1	26555.4	50433.1	87267.1	136529.1
7.5°	4596.9	4131.6	3860.3	3931.5	4474.4	7626.0	18187.5	38630.9	71448.9	121899.5	190896.9
5°	4535.4	4045.9	3828.0	3973.8	4654.6	8959.0	23060.7	47968.8	90632.9	158376.6	249998.8
2.5°	4498.1	3993.9	3808.3	3999.5	4764.8	9776.8	26067.8	53778.2	102711.7	181769.7	289047.8
0°	4485.6	3976.5	3801.7	4008.1	4801.8	10052.6	27084.9	55752.1	106843.8	189860.4	302813.6
-2.5°	4498.1	3993.9	3808.3	3999.5	4764.8	9776.8	26067.8	53778.2	102711.7	181769.7	289047.8
-5°	4535.4	4045.9	3828.0	3973.8	4654.6	8959.0	23060.7	47968.8	90632.9	158376.6	249998.8
-7.5°	4596.9	4131.6	3860.3	3931.5	4474.4	7626.0	18187.5	38630.9	71448.9	121899.5	190896.9
-10°	4682.0	4249.7	3904.8	3873.7	4228.4	5817.9	11628.1	26555.4	50433.1	87267.1	136529.1
-12.5°	4789.6	4398.7	3960.8	3802.0	3985.8	4617.5	8060.5	17604.8	33583.3	54525.5	87267.1
-15°	4893.3	4557.3	4124.3	3874.6	3892.1	4222.8	5192.0	9223.1	19654.9	33583.3	50433.1
-17.5°	4924.8	4718.5	4346.3	3957.3	3815.0	3948.5	4377.4	5740.3	9223.1	17604.8	26555.4
-20°	4960.2	4889.2	4570.8	4187.9	3914.2	3822.0	3967.6	4377.4	5192.0	8060.5	11628.1



REPORT NUMBER: P413440 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: EPH-08-0680R-40-70-1S-HEG

CANDELA DISTRIBUTION (continued):

	-35°	-32.5°	-30°	-27.5°	-25°	-22.5°	-20°	-17.5°	-15°	-12.5°	-10°
-22.5°	4931.2	4931.1	4784.0	4478.7	4107.2	3899.6	3822.0	3948.5	4222.8	4617.5	5817.9
-25°	4869.8	4964.1	4913.4	4725.5	4439.9	4107.2	3914.2	3815.0	3892.1	3985.8	4228.4
-27.5°	4776.6	4893.9	4964.9	4907.4	4725.5	4478.7	4187.9	3957.3	3874.6	3802.0	3873.7
-30°	4663.6	4802.0	4902.0	4964.9	4913.4	4784.0	4570.8	4346.3	4124.3	3960.8	3904.8
-32.5°	3973.2	4676.0	4802.0	4893.9	4964.1	4931.1	4889.2	4718.5	4557.3	4398.7	4249.7
-35°	3110.7	3973.2	4663.6	4776.6	4869.8	4931.2	4960.2	4924.8	4893.3	4789.6	4682.0
-37.5°	2019.1	3011.3	3817.2	4506.3	4726.4	4819.2	4882.9	4930.5	4970.6	4945.5	4924.6
-40°	1539.6	1825.5	2715.2	3508.6	4113.6	4652.8	4731.9	4803.3	4859.5	4893.0	4920.9
-42.5°	1387.6	1495.7	1625.2	2228.6	2964.0	3576.2	4053.4	4482.9	4681.5	4731.6	4773.1
-45°	1345.5	1374.6	1423.4	1537.3	1643.6	2193.1	2769.6	3287.3	3651.7	3951.8	4200.2
-47.5°	1311.8	1331.4	1355.4	1379.5	1422.8	1513.8	1596.6	1736.5	2156.7	2516.7	2814.4
-50°	1253.1	1298.5	1315.7	1331.9	1351.1	1370.3	1387.7	1428.4	1488.5	1539.9	1582.4
-52.5°	1149.3	1205.1	1255.5	1295.9	1309.8	1322.6	1334.2	1347.8	1360.4	1371.1	1380.0
-55°	997.2	1070.2	1139.0	1188.1	1228.5	1265.5	1294.8	1304.3	1312.6	1319.7	1325.5
-57.5°	837.7	908.2	973.6	1032.6	1087.2	1137.2	1174.1	1201.5	1225.4	1245.8	1262.6
-60°	669.9	738.5	799.4	855.9	908.2	956.0	997.2	1034.0	1066.1	1093.5	1116.0
-62.5°	502.8	556.8	615.3	669.9	720.3	765.0	804.2	839.0	869.5	895.4	916.8
-65°	386.2	423.3	458.1	490.5	521.0	562.4	599.9	633.2	662.2	686.9	707.3
-67.5°	267.3	300.9	332.4	361.7	388.5	412.8	434.8	454.3	471.4	485.9	497.8
-70°	152.5	180.2	206.1	230.8	254.6	276.4	296.0	313.4	328.6	341.5	352.1
-72.5°	69.2	76.4	86.8	107.7	127.0	144.6	160.5	174.6	186.9	197.3	205.9
-75°	41.3	41.7	47.4	52.7	57.6	62.1	66.1	69.7	72.8	75.4	77.6
-77.5°	52.1	50.4	48.9	47.5	46.2	45.0	44.0	43.0	42.2	41.5	40.9
-80°	27.8	31.2	34.3	37.3	40.0	42.5	44.7	46.7	48.4	49.9	51.1
-82.5°	28.3	26.9	25.7	24.5	23.5	22.5	21.6	20.9	20.2	19.6	19.1
-85°	27.6	28.8	29.9	31.0	31.9	32.8	33.6	34.3	34.9	35.4	35.8
-87.5°	9.6	9.9	10.1	10.4	10.6	10.8	11.0	11.2	11.3	11.4	11.5
-90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P413440 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: EPH-08-0680R-40-70-1S-HEG

CANDELA DISTRIBUTION (continued):

	-7.5°	-5°	-2.5°	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.6	11.7	11.7	11.7	11.7	11.7	11.6	11.5	11.4	11.3	11.2
85°	36.2	36.4	36.6	36.6	36.6	36.4	36.2	35.8	35.4	34.9	34.3
82.5°	18.8	18.5	18.4	18.3	18.4	18.5	18.8	19.1	19.6	20.2	20.9
80°	52.0	52.7	53.1	53.2	53.1	52.7	52.0	51.1	49.9	48.4	46.7
77.5°	40.5	40.2	40.0	39.9	40.0	40.2	40.5	40.9	41.5	42.2	43.0
75°	79.3	80.5	81.3	81.5	81.3	80.5	79.3	77.6	75.4	72.8	69.7
72.5°	212.6	217.4	220.2	221.2	220.2	217.4	212.6	205.9	197.3	186.9	174.6
70°	360.4	366.3	369.9	371.1	369.9	366.3	360.4	352.1	341.5	328.6	313.4
67.5°	507.1	513.8	517.8	519.1	517.8	513.8	507.1	497.8	485.9	471.4	454.3
65°	723.2	734.6	741.4	743.7	741.4	734.6	723.2	707.3	686.9	662.2	633.2
62.5°	933.5	945.4	952.6	955.0	952.6	945.4	933.5	916.8	895.4	869.5	839.0
60°	1133.6	1146.3	1153.9	1156.4	1153.9	1146.3	1133.6	1116.0	1093.5	1066.1	1034.0
57.5°	1275.8	1285.2	1290.9	1292.8	1290.9	1285.2	1275.8	1262.6	1245.8	1225.4	1201.5
55°	1330.1	1333.4	1335.3	1336.0	1335.3	1333.4	1330.1	1325.5	1319.7	1312.6	1304.3
52.5°	1386.9	1391.9	1394.9	1395.9	1394.9	1391.9	1386.9	1380.0	1371.1	1360.4	1347.8
50°	1615.7	1639.6	1654.0	1658.8	1654.0	1639.6	1615.7	1582.4	1539.9	1488.5	1428.4
47.5°	3048.0	3215.9	3317.1	3350.9	3317.1	3215.9	3048.0	2814.4	2516.7	2156.7	1736.5
45°	4395.3	4535.7	4620.4	4648.7	4620.4	4535.7	4395.3	4200.2	3951.8	3651.7	3287.3
42.5°	4805.8	4829.3	4843.6	4848.3	4843.6	4829.3	4805.8	4773.1	4731.6	4681.5	4482.9
40°	4942.8	4958.6	4968.2	4971.4	4968.2	4958.6	4942.8	4920.9	4893.0	4859.5	4803.3
37.5°	4908.1	4896.2	4889.0	4886.6	4889.0	4896.2	4908.1	4924.6	4945.5	4970.6	4930.5
35°	4596.9	4535.4	4498.1	4485.6	4498.1	4535.4	4596.9	4682.0	4789.6	4893.3	4924.8
32.5°	4131.6	4045.9	3993.9	3976.5	3993.9	4045.9	4131.6	4249.7	4398.7	4557.3	4718.5
30°	3860.3	3828.0	3808.3	3801.7	3808.3	3828.0	3860.3	3904.8	3960.8	4124.3	4346.3
27.5°	3931.5	3973.8	3999.5	4008.1	3999.5	3973.8	3931.5	3873.7	3802.0	3874.6	3957.3
25°	4474.4	4654.6	4764.8	4801.8	4764.8	4654.6	4474.4	4228.4	3985.8	3892.1	3815.0
22.5°	7626.0	8959.0	9776.8	10052.6	9776.8	8959.0	7626.0	5817.9	4617.5	4222.8	3948.5
20°	18187.5	23060.7	26067.8	27084.9	26067.8	23060.7	18187.5	11628.1	8060.5	5192.0	4377.4
17.5°	38630.9	47968.8	53778.2	55752.1	53778.2	47968.8	38630.9	26555.4	17604.8	9223.1	5740.3
15°	71448.9	90632.9	102711.7	106843.8	102711.7	90632.9	71448.9	50433.1	33583.3	19654.9	9223.1
12.5°	121899.5	158376.6	181769.7	189860.4	181769.7	158376.6	121899.5	87267.1	54525.5	33583.3	17604.8
10°	190896.9	249998.8	289047.8	302813.6	289047.8	249998.8	190896.9	136529.1	87267.1	50433.1	26555.4
7.5°	276092.9	353206.6	411225.7	434550.3	411225.7	353206.6	276092.9	190896.9	121899.5	71448.9	38630.9
5°	353206.6	459608.8	537889.2	566405.1	537889.2	459608.8	353206.6	249998.8	158376.6	90632.9	47968.8
2.5°	411225.7	537889.2	628882.8	671562.6	628882.8	537889.2	411225.7	289047.8	181769.7	102711.7	53778.2
0°	434550.3	566405.1	671562.6	732792.7	671562.6	566405.1	434550.3	302813.6	189860.4	106843.8	55752.1
-2.5°	411225.7	537889.2	628882.8	671562.6	628882.8	537889.2	411225.7	289047.8	181769.7	102711.7	53778.2
-5°	353206.6	459608.8	537889.2	566405.1	537889.2	459608.8	353206.6	249998.8	158376.6	90632.9	47968.8
-7.5°	276092.9	353206.6	411225.7	434550.3	411225.7	353206.6	276092.9	190896.9	121899.5	71448.9	38630.9
-10°	190896.9	249998.8	289047.8	302813.6	289047.8	249998.8	190896.9	136529.1	87267.1	50433.1	26555.4
-12.5°	121899.5	158376.6	181769.7	189860.4	181769.7	158376.6	121899.5	87267.1	54525.5	33583.3	17604.8
-15°	71448.9	90632.9	102711.7	106843.8	102711.7	90632.9	71448.9	50433.1	33583.3	19654.9	9223.1
-17.5°	38630.9	47968.8	53778.2	55752.1	53778.2	47968.8	38630.9	26555.4	17604.8	9223.1	5740.3
-20°	18187.5	23060.7	26067.8	27084.9	26067.8	23060.7	18187.5	11628.1	8060.5	5192.0	4377.4



REPORT NUMBER: P413440 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: EPH-08-0680R-40-70-1S-HEG

CANDELA DISTRIBUTION (continued):

	-7.5°	-5°	-2.5°	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°
-22.5°	7626.0	8959.0	9776.8	10052.6	9776.8	8959.0	7626.0	5817.9	4617.5	4222.8	3948.5
-25°	4474.4	4654.6	4764.8	4801.8	4764.8	4654.6	4474.4	4228.4	3985.8	3892.1	3815.0
-27.5°	3931.5	3973.8	3999.5	4008.1	3999.5	3973.8	3931.5	3873.7	3802.0	3874.6	3957.3
-30°	3860.3	3828.0	3808.3	3801.7	3808.3	3828.0	3860.3	3904.8	3960.8	4124.3	4346.3
-32.5°	4131.6	4045.9	3993.9	3976.5	3993.9	4045.9	4131.6	4249.7	4398.7	4557.3	4718.5
-35°	4596.9	4535.4	4498.1	4485.6	4498.1	4535.4	4596.9	4682.0	4789.6	4893.3	4924.8
-37.5°	4908.1	4896.2	4889.0	4886.6	4889.0	4896.2	4908.1	4924.6	4945.5	4970.6	4930.5
-40°	4942.8	4958.6	4968.2	4971.4	4968.2	4958.6	4942.8	4920.9	4893.0	4859.5	4803.3
-42.5°	4805.8	4829.3	4843.6	4848.3	4843.6	4829.3	4805.8	4773.1	4731.6	4681.5	4482.9
-45°	4395.3	4535.7	4620.4	4648.7	4620.4	4535.7	4395.3	4200.2	3951.8	3651.7	3287.3
-47.5°	3048.0	3215.9	3317.1	3350.9	3317.1	3215.9	3048.0	2814.4	2516.7	2156.7	1736.5
-50°	1615.7	1639.6	1654.0	1658.8	1654.0	1639.6	1615.7	1582.4	1539.9	1488.5	1428.4
-52.5°	1386.9	1391.9	1394.9	1395.9	1394.9	1391.9	1386.9	1380.0	1371.1	1360.4	1347.8
-55°	1330.1	1333.4	1335.3	1336.0	1335.3	1333.4	1330.1	1325.5	1319.7	1312.6	1304.3
-57.5°	1275.8	1285.2	1290.9	1292.8	1290.9	1285.2	1275.8	1262.6	1245.8	1225.4	1201.5
-60°	1133.6	1146.3	1153.9	1156.4	1153.9	1146.3	1133.6	1116.0	1093.5	1066.1	1034.0
-62.5°	933.5	945.4	952.6	955.0	952.6	945.4	933.5	916.8	895.4	869.5	839.0
-65°	723.2	734.6	741.4	743.7	741.4	734.6	723.2	707.3	686.9	662.2	633.2
-67.5°	507.1	513.8	517.8	519.1	517.8	513.8	507.1	497.8	485.9	471.4	454.3
-70°	360.4	366.3	369.9	371.1	369.9	366.3	360.4	352.1	341.5	328.6	313.4
-72.5°	212.6	217.4	220.2	221.2	220.2	217.4	212.6	205.9	197.3	186.9	174.6
-75°	79.3	80.5	81.3	81.5	81.3	80.5	79.3	77.6	75.4	72.8	69.7
-77.5°	40.5	40.2	40.0	39.9	40.0	40.2	40.5	40.9	41.5	42.2	43.0
-80°	52.0	52.7	53.1	53.2	53.1	52.7	52.0	51.1	49.9	48.4	46.7
-82.5°	18.8	18.5	18.4	18.3	18.4	18.5	18.8	19.1	19.6	20.2	20.9
-85°	36.2	36.4	36.6	36.6	36.6	36.4	36.2	35.8	35.4	34.9	34.3
-87.5°	11.6	11.7	11.7	11.7	11.7	11.7	11.6	11.5	11.4	11.3	11.2
-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):

	20°	22.5°	25°	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.0	10.8	10.6	10.4	10.1	9.9	9.6	9.3	9.0	8.6	8.3
85°	33.6	32.8	31.9	31.0	29.9	28.8	27.6	26.3	24.9	23.5	22.0
82.5°	21.6	22.5	23.5	24.5	25.7	26.9	28.3	29.7	31.2	32.8	34.4
80°	44.7	42.5	40.0	37.3	34.3	31.2	27.8	24.1	20.3	19.4	21.6
77.5°	44.0	45.0	46.2	47.5	48.9	50.4	52.1	51.6	46.8	41.8	36.5
75°	66.1	62.1	57.6	52.7	47.4	41.7	41.3	43.4	45.6	47.9	50.3
72.5°	160.5	144.6	127.0	107.7	86.8	76.4	69.2	61.6	53.5	45.0	41.1
70°	296.0	276.4	254.6	230.8	206.1	180.2	152.5	123.1	92.1	74.9	64.8
67.5°	434.8	412.8	388.5	361.7	332.4	300.9	267.3	231.6	195.9	159.1	120.6
65°	599.9	562.4	521.0	490.5	458.1	423.3	386.2	346.5	304.5	260.5	214.9
62.5°	804.2	765.0	720.3	669.9	615.3	556.8	502.8	459.3	413.4	365.3	314.5
60°	997.2	956.0	908.2	855.9	799.4	738.5	669.9	597.3	521.0	467.7	412.8
57.5°	1174.1	1137.2	1087.2	1032.6	973.6	908.2	837.7	763.2	681.3	594.3	509.0
55°	1294.8	1265.5	1228.5	1188.1	1139.0	1070.2	997.2	918.5	833.7	745.1	647.3
52.5°	1334.2	1322.6	1309.8	1295.9	1255.5	1205.1	1149.3	1066.1	978.9	884.7	785.7
50°	1387.7	1370.3	1351.1	1331.9	1315.7	1298.5	1253.1	1192.5	1116.0	1018.5	915.6
47.5°	1596.6	1513.8	1422.8	1379.5	1355.4	1331.4	1311.8	1287.9	1220.1	1146.3	1038.5
45°	2769.6	2193.1	1643.6	1537.3	1423.4	1374.6	1345.5	1320.9	1297.9	1234.0	1156.4
42.5°	4053.4	3576.2	2964.0	2228.6	1625.2	1495.7	1387.6	1355.1	1325.4	1300.2	1234.0
40°	4731.9	4652.8	4113.6	3508.6	2715.2	1825.5	1539.6	1394.1	1358.3	1325.4	1297.9
37.5°	4882.9	4819.2	4726.4	4506.3	3817.2	3011.3	2019.1	1554.3	1394.1	1355.1	1320.9
35°	4960.2	4931.2	4869.8	4776.6	4663.6	3973.2	3110.7	2019.1	1539.6	1387.6	1345.5
32.5°	4889.2	4931.1	4964.1	4893.9	4802.0	4676.0	3973.2	3011.3	1825.5	1495.7	1374.6
30°	4570.8	4784.0	4913.4	4964.9	4902.0	4802.0	4663.6	3817.2	2715.2	1625.2	1423.4
27.5°	4187.9	4478.7	4725.5	4907.4	4964.9	4893.9	4776.6	4506.3	3508.6	2228.6	1537.3
25°	3914.2	4107.2	4439.9	4725.5	4913.4	4964.1	4869.8	4726.4	4113.6	2964.0	1643.6
22.5°	3822.0	3899.6	4107.2	4478.7	4784.0	4931.1	4931.2	4819.2	4652.8	3576.2	2193.1
20°	3967.6	3822.0	3914.2	4187.9	4570.8	4889.2	4960.2	4882.9	4731.9	4053.4	2769.6
17.5°	4377.4	3948.5	3815.0	3957.3	4346.3	4718.5	4924.8	4930.5	4803.3	4482.9	3287.3
15°	5192.0	4222.8	3892.1	3874.6	4124.3	4557.3	4893.3	4970.6	4859.5	4681.5	3651.7
12.5°	8060.5	4617.5	3985.8	3802.0	3960.8	4398.7	4789.6	4945.5	4893.0	4731.6	3951.8
10°	11628.1	5817.9	4228.4	3873.7	3904.8	4249.7	4682.0	4924.6	4920.9	4773.1	4200.2
7.5°	18187.5	7626.0	4474.4	3931.5	3860.3	4131.6	4596.9	4908.1	4942.8	4805.8	4395.3
5°	23060.7	8959.0	4654.6	3973.8	3828.0	4045.9	4535.4	4896.2	4958.6	4829.3	4535.7
2.5°	26067.8	9776.8	4764.8	3999.5	3808.3	3993.9	4498.1	4889.0	4968.2	4843.6	4620.4
0°	27084.9	10052.6	4801.8	4008.1	3801.7	3976.5	4485.6	4886.6	4971.4	4848.3	4648.7
-2.5°	26067.8	9776.8	4764.8	3999.5	3808.3	3993.9	4498.1	4889.0	4968.2	4843.6	4620.4
-5°	23060.7	8959.0	4654.6	3973.8	3828.0	4045.9	4535.4	4896.2	4958.6	4829.3	4535.7
-7.5°	18187.5	7626.0	4474.4	3931.5	3860.3	4131.6	4596.9	4908.1	4942.8	4805.8	4395.3
-10°	11628.1	5817.9	4228.4	3873.7	3904.8	4249.7	4682.0	4924.6	4920.9	4773.1	4200.2
-12.5°	8060.5	4617.5	3985.8	3802.0	3960.8	4398.7	4789.6	4945.5	4893.0	4731.6	3951.8
-15°	5192.0	4222.8	3892.1	3874.6	4124.3	4557.3	4893.3	4970.6	4859.5	4681.5	3651.7
-17.5°	4377.4	3948.5	3815.0	3957.3	4346.3	4718.5	4924.8	4930.5	4803.3	4482.9	3287.3
-20°	3967.6	3822.0	3914.2	4187.9	4570.8	4889.2	4960.2	4882.9	4731.9	4053.4	2769.6



REPORT NUMBER: P413440 (CONVERTED FROM TYPE C PHOTOMETRY)
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CANDELA DISTRIBUTION (continued):

	20°	22.5°	25°	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°
-22.5°	3822.0	3899.6	4107.2	4478.7	4784.0	4931.1	4931.2	4819.2	4652.8	3576.2	2193.1
-25°	3914.2	4107.2	4439.9	4725.5	4913.4	4964.1	4869.8	4726.4	4113.6	2964.0	1643.6
-27.5°	4187.9	4478.7	4725.5	4907.4	4964.9	4893.9	4776.6	4506.3	3508.6	2228.6	1537.3
-30°	4570.8	4784.0	4913.4	4964.9	4902.0	4802.0	4663.6	3817.2	2715.2	1625.2	1423.4
-32.5°	4889.2	4931.1	4964.1	4893.9	4802.0	4676.0	3973.2	3011.3	1825.5	1495.7	1374.6
-35°	4960.2	4931.2	4869.8	4776.6	4663.6	3973.2	3110.7	2019.1	1539.6	1387.6	1345.5
-37.5°	4882.9	4819.2	4726.4	4506.3	3817.2	3011.3	2019.1	1554.3	1394.1	1355.1	1320.9
-40°	4731.9	4652.8	4113.6	3508.6	2715.2	1825.5	1539.6	1394.1	1358.3	1325.4	1297.9
-42.5°	4053.4	3576.2	2964.0	2228.6	1625.2	1495.7	1387.6	1355.1	1325.4	1300.2	1234.0
-45°	2769.6	2193.1	1643.6	1537.3	1423.4	1374.6	1345.5	1320.9	1297.9	1234.0	1156.4
-47.5°	1596.6	1513.8	1422.8	1379.5	1355.4	1331.4	1311.8	1287.9	1220.1	1146.3	1038.5
-50°	1387.7	1370.3	1351.1	1331.9	1315.7	1298.5	1253.1	1192.5	1116.0	1018.5	915.6
-52.5°	1334.2	1322.6	1309.8	1295.9	1255.5	1205.1	1149.3	1066.1	978.9	884.7	785.7
-55°	1294.8	1265.5	1228.5	1188.1	1139.0	1070.2	997.2	918.5	833.7	745.1	647.3
-57.5°	1174.1	1137.2	1087.2	1032.6	973.6	908.2	837.7	763.2	681.3	594.3	509.0
-60°	997.2	956.0	908.2	855.9	799.4	738.5	669.9	597.3	521.0	467.7	412.8
-62.5°	804.2	765.0	720.3	669.9	615.3	556.8	502.8	459.3	413.4	365.3	314.5
-65°	599.9	562.4	521.0	490.5	458.1	423.3	386.2	346.5	304.5	260.5	214.9
-67.5°	434.8	412.8	388.5	361.7	332.4	300.9	267.3	231.6	195.9	159.1	120.6
-70°	296.0	276.4	254.6	230.8	206.1	180.2	152.5	123.1	92.1	74.9	64.8
-72.5°	160.5	144.6	127.0	107.7	86.8	76.4	69.2	61.6	53.5	45.0	41.1
-75°	66.1	62.1	57.6	52.7	47.4	41.7	41.3	43.4	45.6	47.9	50.3
-77.5°	44.0	45.0	46.2	47.5	48.9	50.4	52.1	51.6	46.8	41.8	36.5
-80°	44.7	42.5	40.0	37.3	34.3	31.2	27.8	24.1	20.3	19.4	21.6
-82.5°	21.6	22.5	23.5	24.5	25.7	26.9	28.3	29.7	31.2	32.8	34.4
-85°	33.6	32.8	31.9	31.0	29.9	28.8	27.6	26.3	24.9	23.5	22.0
-87.5°	11.0	10.8	10.6	10.4	10.1	9.9	9.6	9.3	9.0	8.6	8.3
-90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P413440 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: EPH-08-0680R-40-70-1S-HEG

CANDELA DISTRIBUTION (continued):

	47.5°	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.9	7.5	7.1	6.7	6.3	5.8	5.4	4.9	4.5	4.0	3.5
85°	20.4	18.8	17.1	15.3	13.5	11.7	10.8	9.9	8.9	8.0	7.0
82.5°	36.2	34.7	32.2	29.6	26.9	24.1	21.2	18.3	15.3	12.3	10.5
80°	23.9	26.3	28.8	31.4	34.0	36.4	32.6	28.7	24.8	20.7	16.6
77.5°	31.0	25.2	19.3	21.0	24.3	27.7	31.2	34.8	34.1	29.1	24.0
75°	52.8	47.3	40.2	32.8	25.2	18.8	23.0	27.2	31.6	36.0	31.3
72.5°	44.0	47.1	50.3	52.2	43.4	34.3	25.0	19.8	24.8	30.0	35.2
70°	54.2	43.2	42.5	46.2	50.1	51.1	40.4	29.6	18.6	24.0	30.0
67.5°	81.2	68.9	56.1	42.9	43.3	47.7	52.3	43.5	31.2	18.6	24.8
65°	170.3	124.1	80.0	65.3	50.3	41.5	46.5	51.7	43.5	29.6	19.8
62.5°	261.8	208.1	155.6	101.5	70.9	54.0	40.9	46.5	52.3	40.4	25.0
60°	355.7	296.0	234.4	174.6	114.1	72.8	54.0	41.5	47.7	51.1	34.3
57.5°	447.1	383.2	316.7	248.2	180.9	114.1	70.9	50.3	43.3	50.1	43.4
55°	546.0	467.9	396.9	323.6	248.2	174.6	101.5	65.3	42.9	46.2	52.2
52.5°	679.5	567.2	474.8	396.9	316.7	234.4	155.6	80.0	56.1	42.5	50.3
50°	806.1	690.2	567.2	467.9	383.2	296.0	208.1	124.1	68.9	43.2	47.1
47.5°	926.0	806.1	679.5	546.0	447.1	355.7	261.8	170.3	81.2	54.2	44.0
45°	1038.5	915.6	785.7	647.3	509.0	412.8	314.5	214.9	120.6	64.8	41.1
42.5°	1146.3	1018.5	884.7	745.1	594.3	467.7	365.3	260.5	159.1	74.9	45.0
40°	1220.1	1116.0	978.9	833.7	681.3	521.0	413.4	304.5	195.9	92.1	53.5
37.5°	1287.9	1192.5	1066.1	918.5	763.2	597.3	459.3	346.5	231.6	123.1	61.6
35°	1311.8	1253.1	1149.3	997.2	837.7	669.9	502.8	386.2	267.3	152.5	69.2
32.5°	1331.4	1298.5	1205.1	1070.2	908.2	738.5	556.8	423.3	300.9	180.2	76.4
30°	1355.4	1315.7	1255.5	1139.0	973.6	799.4	615.3	458.1	332.4	206.1	86.8
27.5°	1379.5	1331.9	1295.9	1188.1	1032.6	855.9	669.9	490.5	361.7	230.8	107.7
25°	1422.8	1351.1	1309.8	1228.5	1087.2	908.2	720.3	521.0	388.5	254.6	127.0
22.5°	1513.8	1370.3	1322.6	1265.5	1137.2	956.0	765.0	562.4	412.8	276.4	144.6
20°	1596.6	1387.7	1334.2	1294.8	1174.1	997.2	804.2	599.9	434.8	296.0	160.5
17.5°	1736.5	1428.4	1347.8	1304.3	1201.5	1034.0	839.0	633.2	454.3	313.4	174.6
15°	2156.7	1488.5	1360.4	1312.6	1225.4	1066.1	869.5	662.2	471.4	328.6	186.9
12.5°	2516.7	1539.9	1371.1	1319.7	1245.8	1093.5	895.4	686.9	485.9	341.5	197.3
10°	2814.4	1582.4	1380.0	1325.5	1262.6	1116.0	916.8	707.3	497.8	352.1	205.9
7.5°	3048.0	1615.7	1386.9	1330.1	1275.8	1133.6	933.5	723.2	507.1	360.4	212.6
5°	3215.9	1639.6	1391.9	1333.4	1285.2	1146.3	945.4	734.6	513.8	366.3	217.4
2.5°	3317.1	1654.0	1394.9	1335.3	1290.9	1153.9	952.6	741.4	517.8	369.9	220.2
0°	3350.9	1658.8	1395.9	1336.0	1292.8	1156.4	955.0	743.7	519.1	371.1	221.2
-2.5°	3317.1	1654.0	1394.9	1335.3	1290.9	1153.9	952.6	741.4	517.8	369.9	220.2
-5°	3215.9	1639.6	1391.9	1333.4	1285.2	1146.3	945.4	734.6	513.8	366.3	217.4
-7.5°	3048.0	1615.7	1386.9	1330.1	1275.8	1133.6	933.5	723.2	507.1	360.4	212.6
-10°	2814.4	1582.4	1380.0	1325.5	1262.6	1116.0	916.8	707.3	497.8	352.1	205.9
-12.5°	2516.7	1539.9	1371.1	1319.7	1245.8	1093.5	895.4	686.9	485.9	341.5	197.3
-15°	2156.7	1488.5	1360.4	1312.6	1225.4	1066.1	869.5	662.2	471.4	328.6	186.9
-17.5°	1736.5	1428.4	1347.8	1304.3	1201.5	1034.0	839.0	633.2	454.3	313.4	174.6
-20°	1596.6	1387.7	1334.2	1294.8	1174.1	997.2	804.2	599.9	434.8	296.0	160.5



REPORT NUMBER: P413440 (CONVERTED FROM TYPE C PHOTOMETRY)
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CANDELA DISTRIBUTION (continued):

	47.5°	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°
-22.5°	1513.8	1370.3	1322.6	1265.5	1137.2	956.0	765.0	562.4	412.8	276.4	144.6
-25°	1422.8	1351.1	1309.8	1228.5	1087.2	908.2	720.3	521.0	388.5	254.6	127.0
-27.5°	1379.5	1331.9	1295.9	1188.1	1032.6	855.9	669.9	490.5	361.7	230.8	107.7
-30°	1355.4	1315.7	1255.5	1139.0	973.6	799.4	615.3	458.1	332.4	206.1	86.8
-32.5°	1331.4	1298.5	1205.1	1070.2	908.2	738.5	556.8	423.3	300.9	180.2	76.4
-35°	1311.8	1253.1	1149.3	997.2	837.7	669.9	502.8	386.2	267.3	152.5	69.2
-37.5°	1287.9	1192.5	1066.1	918.5	763.2	597.3	459.3	346.5	231.6	123.1	61.6
-40°	1220.1	1116.0	978.9	833.7	681.3	521.0	413.4	304.5	195.9	92.1	53.5
-42.5°	1146.3	1018.5	884.7	745.1	594.3	467.7	365.3	260.5	159.1	74.9	45.0
-45°	1038.5	915.6	785.7	647.3	509.0	412.8	314.5	214.9	120.6	64.8	41.1
-47.5°	926.0	806.1	679.5	546.0	447.1	355.7	261.8	170.3	81.2	54.2	44.0
-50°	806.1	690.2	567.2	467.9	383.2	296.0	208.1	124.1	68.9	43.2	47.1
-52.5°	679.5	567.2	474.8	396.9	316.7	234.4	155.6	80.0	56.1	42.5	50.3
-55°	546.0	467.9	396.9	323.6	248.2	174.6	101.5	65.3	42.9	46.2	52.2
-57.5°	447.1	383.2	316.7	248.2	180.9	114.1	70.9	50.3	43.3	50.1	43.4
-60°	355.7	296.0	234.4	174.6	114.1	72.8	54.0	41.5	47.7	51.1	34.3
-62.5°	261.8	208.1	155.6	101.5	70.9	54.0	40.9	46.5	52.3	40.4	25.0
-65°	170.3	124.1	80.0	65.3	50.3	41.5	46.5	51.7	43.5	29.6	19.8
-67.5°	81.2	68.9	56.1	42.9	43.3	47.7	52.3	43.5	31.2	18.6	24.8
-70°	54.2	43.2	42.5	46.2	50.1	51.1	40.4	29.6	18.6	24.0	30.0
-72.5°	44.0	47.1	50.3	52.2	43.4	34.3	25.0	19.8	24.8	30.0	35.2
-75°	52.8	47.3	40.2	32.8	25.2	18.8	23.0	27.2	31.6	36.0	31.3
-77.5°	31.0	25.2	19.3	21.0	24.3	27.7	31.2	34.8	34.1	29.1	24.0
-80°	23.9	26.3	28.8	31.4	34.0	36.4	32.6	28.7	24.8	20.7	16.6
-82.5°	36.2	34.7	32.2	29.6	26.9	24.1	21.2	18.3	15.3	12.3	10.5
-85°	20.4	18.8	17.1	15.3	13.5	11.7	10.8	9.9	8.9	8.0	7.0
-87.5°	7.9	7.5	7.1	6.7	6.3	5.8	5.4	4.9	4.5	4.0	3.5
-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):

	75°	77.5°	80°	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.0	2.5	2.0	1.5	1.0	0.5	0.0
85°	6.0	5.1	4.1	3.1	2.0	1.0	0.0
82.5°	9.1	7.6	6.1	4.6	3.1	1.5	0.0
80°	12.5	10.1	8.1	6.1	4.1	2.0	0.0
77.5°	18.8	13.5	10.1	7.6	5.1	2.5	0.0
75°	25.1	18.8	12.5	9.1	6.0	3.0	0.0
72.5°	31.3	24.0	16.6	10.5	7.0	3.5	0.0
70°	36.0	29.1	20.7	12.3	8.0	4.0	0.0
67.5°	31.6	34.1	24.8	15.3	8.9	4.5	0.0
65°	27.2	34.8	28.7	18.3	9.9	4.9	0.0
62.5°	23.0	31.2	32.6	21.2	10.8	5.4	0.0
60°	18.8	27.7	36.4	24.1	11.7	5.8	0.0
57.5°	25.2	24.3	34.0	26.9	13.5	6.3	0.0
55°	32.8	21.0	31.4	29.6	15.3	6.7	0.0
52.5°	40.2	19.3	28.8	32.2	17.1	7.1	0.0
50°	47.3	25.2	26.3	34.7	18.8	7.5	0.0
47.5°	52.8	31.0	23.9	36.2	20.4	7.9	0.0
45°	50.3	36.5	21.6	34.4	22.0	8.3	0.0
42.5°	47.9	41.8	19.4	32.8	23.5	8.6	0.0
40°	45.6	46.8	20.3	31.2	24.9	9.0	0.0
37.5°	43.4	51.6	24.1	29.7	26.3	9.3	0.0
35°	41.3	52.1	27.8	28.3	27.6	9.6	0.0
32.5°	41.7	50.4	31.2	26.9	28.8	9.9	0.0
30°	47.4	48.9	34.3	25.7	29.9	10.1	0.0
27.5°	52.7	47.5	37.3	24.5	31.0	10.4	0.0
25°	57.6	46.2	40.0	23.5	31.9	10.6	0.0
22.5°	62.1	45.0	42.5	22.5	32.8	10.8	0.0
20°	66.1	44.0	44.7	21.6	33.6	11.0	0.0
17.5°	69.7	43.0	46.7	20.9	34.3	11.2	0.0
15°	72.8	42.2	48.4	20.2	34.9	11.3	0.0
12.5°	75.4	41.5	49.9	19.6	35.4	11.4	0.0
10°	77.6	40.9	51.1	19.1	35.8	11.5	0.0
7.5°	79.3	40.5	52.0	18.8	36.2	11.6	0.0
5°	80.5	40.2	52.7	18.5	36.4	11.7	0.0
2.5°	81.3	40.0	53.1	18.4	36.6	11.7	0.0
0°	81.5	39.9	53.2	18.3	36.6	11.7	0.0
-2.5°	81.3	40.0	53.1	18.4	36.6	11.7	0.0
-5°	80.5	40.2	52.7	18.5	36.4	11.7	0.0
-7.5°	79.3	40.5	52.0	18.8	36.2	11.6	0.0
-10°	77.6	40.9	51.1	19.1	35.8	11.5	0.0
-12.5°	75.4	41.5	49.9	19.6	35.4	11.4	0.0
-15°	72.8	42.2	48.4	20.2	34.9	11.3	0.0
-17.5°	69.7	43.0	46.7	20.9	34.3	11.2	0.0
-20°	66.1	44.0	44.7	21.6	33.6	11.0	0.0



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 CATALOG NUMBER: EPH-08-0680R-40-70-1S-HEG

CANDELA DISTRIBUTION (continued):

	75°	77.5°	80°	82.5°	85°	87.5°	90°
-22.5°	62.1	45.0	42.5	22.5	32.8	10.8	0.0
-25°	57.6	46.2	40.0	23.5	31.9	10.6	0.0
-27.5°	52.7	47.5	37.3	24.5	31.0	10.4	0.0
-30°	47.4	48.9	34.3	25.7	29.9	10.1	0.0
-32.5°	41.7	50.4	31.2	26.9	28.8	9.9	0.0
-35°	41.3	52.1	27.8	28.3	27.6	9.6	0.0
-37.5°	43.4	51.6	24.1	29.7	26.3	9.3	0.0
-40°	45.6	46.8	20.3	31.2	24.9	9.0	0.0
-42.5°	47.9	41.8	19.4	32.8	23.5	8.6	0.0
-45°	50.3	36.5	21.6	34.4	22.0	8.3	0.0
-47.5°	52.8	31.0	23.9	36.2	20.4	7.9	0.0
-50°	47.3	25.2	26.3	34.7	18.8	7.5	0.0
-52.5°	40.2	19.3	28.8	32.2	17.1	7.1	0.0
-55°	32.8	21.0	31.4	29.6	15.3	6.7	0.0
-57.5°	25.2	24.3	34.0	26.9	13.5	6.3	0.0
-60°	18.8	27.7	36.4	24.1	11.7	5.8	0.0
-62.5°	23.0	31.2	32.6	21.2	10.8	5.4	0.0
-65°	27.2	34.8	28.7	18.3	9.9	4.9	0.0
-67.5°	31.6	34.1	24.8	15.3	8.9	4.5	0.0
-70°	36.0	29.1	20.7	12.3	8.0	4.0	0.0
-72.5°	31.3	24.0	16.6	10.5	7.0	3.5	0.0
-75°	25.1	18.8	12.5	9.1	6.0	3.0	0.0
-77.5°	18.8	13.5	10.1	7.6	5.1	2.5	0.0
-80°	12.5	10.1	8.1	6.1	4.1	2.0	0.0
-82.5°	9.1	7.6	6.1	4.6	3.1	1.5	0.0
-85°	6.0	5.1	4.1	3.1	2.0	1.0	0.0
-87.5°	3.0	2.5	2.0	1.5	1.0	0.5	0.0
-90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





Horizontal Angle (degrees)



Horizontal Angle (degrees)

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

